Usenet Newsgroup Archive: rec.radio.amateur.antenna

2004-07 - 2004-09

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Date span: 2004-07-01 through 2004-09-30

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 3,874

Message records with no readable body available in the source text: 4

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: what justify so high price... nothing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 00:47:26 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10e6np7863u07a8@corp.supernews.com>
Source record: 92772
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

Now wait a minute Dave, what about all those Republican capitalist infidels and the offshore accounts? That thread was just great! You're just gonna let it go with this explanation, "please note: (sic) canadian funds?" You could have thrown in some Rooskie Mafia and islamic terroids, and all kinds of stuff that would improve the explanation on why it costs us, the American Taxpayer, more money for them damn Cushcrafts!

Butch

Dave Holford wrote:
>
> Thierry wrote:
>
>>Hi,
>>
>>Compare these prices for the Cuschcraft MA5B :
>>http://www.durhamradio.com/cushcraft-ma5b.htm $599
>>
>>http://www.chq-inc.com/asp/details.asp?mod=MA5B&man=cush, less than $400
>>
>>The first deny any eplanations, so someone could help me to understand why
>>Keith sold this antenna at such a price...
>>
>>Thanks in advance.
>>
>>73
>>Thierry
>
>
>
>
> Look at the Durham Radio home page - It states clearly (in red yet)
>
> "Please Note: Unless otherwise stated,
> all prices are listed in Canadian Funds."
>
> 400USD is pretty close to 600Can.
>
> Dave

2. Re: Vertical 40m~6m

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 01:39:49 UTC
From: walter <wtmjr@airmail.net>
Message-ID: <cbvq1c$kt4@library2.airnews.net>
Source record: 92773

gap eagle....

/* frank */ wrote:
> Which vertical antenna 40m~6m (WARC included) do you suggest?
> Thanks

3. Re: can you use tv coax for 10 /11.meters please help the rookie

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 02:15:14 UTC
From: walter <wtmjr@airmail.net>
Message-ID: <cbvs3o$642@library2.airnews.net>
Source record: 92774

Cut it for a multiple of 1/2 wavelengths.... Use type "f" connectors
and adaptors to uhf or whatever you want to use....

When the transmission line is cut for a multiple of 1/2 wavelength for a
particular frequency, you can put 100 ohms at one end and it will see
the exact impedance at the other end....

I use it on a 40/20 meter cross dipole and it works great and has very
low loss...

walter

g g wrote:
> i wont to build a dipole ant for 10 meters can i use tv coax .or do i
> need to use rg.58
>

4. Re: 40M V Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 03:39:20 UTC
From: Bob Wood <bobw@zianet.com>
Message-ID: <10e71rcnm1ldbaf@corp.supernews.com>
Source record: 92775

I want to thank all that replied to my request for information on the 40M V-Beam. I certainly learned a tremendous amount of new things to consider and to try. I did not realize that a V-Beam was numerous wavelengths and that fact alone precludes the installation of such for my current residence. I believe that I will try a better, higher, high quality dipole and then experiment with a horizontal loop and perhaps a phased horizontal array if I can squeeze these within the property lines.

Thanks again to all who shared their time and ideas with me and others monitoring this thread.

Bob Wood
W5QCP
Alamogordo, NM

5. Re: best antenna over a carport?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 04:17:32 UTC
From: eternalsquire@comcast.net
Message-ID: <904dab11.0406302017.1aa9ae1c@posting.google.com>
Source record: 92776

```
Mike Luther <mike.luther@ziplog.com> wrote in message
news:<10e5l6jbn1897c8@corp.supernews.com>...
> And for nostalgia with Hemingway antenna .. chuckle ..
>
> H. Adam Stevens, NQ5H wrote:
>
> >"Tdonaly" <tdonaly@aol.com> wrote in message
> >news:20040629220728.29691.00000700@mb-m18.aol.com...
> >
> >
> >>H wrote,
> >>
> >>
> >>>longwire
> >>>ground to biggest conductor nearby
> >>>tuner
> >>>get on the air
> >>>
> >>>I dare not attempt construction of sentences comparable to Richard's, so
> >>>
> >>>
> >>>I
> >>
> >>
> >>>thought I'd just get to the point.
> >>>73 es gud dx
> >>>H.
> >>>NQ5H
> >>>
> >>>
> >>>
> >>Reminds me of Hemingway.
> >>73,
> >>Tom Donaly, KA6RUH
> >>
> >>
> >>
> >>
> >With his best bourbon.
> >tnx es 73
> >de
> >NQ5H
> >
> >
```

> >
> >
> >
> >Why did the chicken cross the road?
> >
> >To die.
> >In the rain.
> >
> >
> >
> >
> Use Hemingray insulators!
>
> ;)

Golly gee, and I thought the chicken crossed the road because he
failed to make Low Earth Orbit!

6. FS: Dualband 2m/70cm yagi and 6m yagi

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 04:38:46 UTC
From: Andy in NJ <"SHORECOGS at COMCAST DOT NET">
Message-ID: <7aqdnWaKz6H9CH7dRVn-gQ@comcast.com>
Source record: 92777
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.swap,rec.radio.swap

I have for sale the following antennas. This is for PICK UP ONLY from
Beachwood, NJ.

Cushcraft A27010S 10dB Dual Band Yagi. 5 elements on each.
Check out http://www.cushcraft.com/amateur/details.asp?catid=182 for details
on this antenna.

MFJ-1762 6m 3 element yagi.
Details: http://www.mfjenterprises.com/products.php?prodid=MFJ-1762

The MFJ is about 2 - 3 years old and the Cushcraft is about 1 - 2 years old.
Both are in working order and currently assembled. They were taken down when
I had my roof redone and I don't feel like putting them back up.

BEST OFFER. I also have a tripod, a couple of masts and a TV antenna rotator
from Radio Shack that I've used to rotate these antennas.

--
73! de Andy KC2SSB
http://shorecogs.tripod.com
AIM: shorecogs

7. Antenna in mountain

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 08:25:18 UTC
From: Bernard Brun <info@bouquetin.com>
Message-ID: <cc0hpg$c28$1@news-reader3.wanadoo.fr>
Source record: 92778

Hello,

I am interested by all experiments concerning the installation and the type of antennas to be used for a station located in mountain. Decametric band and VHF.If possible !

Situation:

French Alps

1.300 meters of altitude.

QTH : 45° 27' 24" North - 6° 41' 56" East

Locator JN35IK

Mask in the north located at 1.000 m. far, altitude 2.300 m.

Mask in the south located at 4.500 m. far, altitude 2.300 m.

Mask in the west located at 3.000 m. far, altitude 1.800 m.

Mask in the East located at 1.500 m. far, altitude 1.900 m.

Mask in western south located at 8.000 m. far, altitude 2.600 m.

Have a large ground, possibility of installing any type of material

Thanks in advance for any suggestion

--
Bernard Brun
Info@bouquetin.com
http://www.bouquetin.com
Phone : ++33(0) 479 550 113
Fax : ++33(0) 479 550 476

8. Re: Signal interference with nearby aluminum reflectors?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 11:01:23 UTC
From: dave.harper@gmail.com
Message-ID: <364fd697.0407010301.c2303da@posting.google.com>
Source record: 92779

"Dama Foster" <nospam@invalid.com> wrote in message news:<2kgltfF27ef0U1@uni-berlin.de>...
> It is a reflector, and will change the pattern. How much depends on how the
> Al is configured to the antenna, and the spacing. The wavelength is about 1
> foot, so your dimentions indicate that something will happen. (10 inch or
> 10 foot?) Quickest way is to just try it. The type of antenna the handheld
> has determines quite a bit too. THe antenna needs to see the sky, many times
> it dosent matter what it is mounted on, but then you have a handheld, that
> can be different.
>
> "David Harper" <dave.harper@gmail.com> wrote in message
> news:364fd697.0406301200.699aa311@posting.google.com...
> > I was wondering what effect aluminum foil (used as a radiation heat
> > shield) would have on GPS signal reception? The scenario is a small
> > payload container (approx 10" cube) covered in polystyrene, with a
> > handheld GPS reciever located near the top on one corner.
> >
> > Would aluminum foil on the inner sides (and/or bottom) interfere with
> > the reception of the signal? I'm worried about possible reflection or
> > other mechanisms of interference that might occur and prevent good
> > reception. Basically, my question is, would foil on the sides or the
> > bottom pose a reception problem? Are there any "configurations" that
> > might not pose a problem? (i.e. 2 furthest sides only, half of bottom
> > only, etc).
> >
> > Thanks in advance for any insight!
> > Dave

Thanks for all the help people. Based on the info, I think I'll look
into replacing the handheld (etrex) with an OEM sensor and an external
antenna. Some of the OEM sensors are running under $100.

THanks again!
Dave

9. Re: Antenna in mountain

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 12:30:28 UTC
From: Helmut <MyCallSign@qsl.net>
Message-ID: <cc104v$3r1$04$1@news.t-online.com>
Source record: 92780

Bernhard,

your situation is not oo bad, there are worse scenarios here in Austria.
Aome of my frieds operate from similar locations.

Please keep in mind, that VHF and UHF do verry much reflect from your
surrounding "masks", and you would not believe what is possible to reach
without line of sight.

So any installation of antennas, suitable for the band, will do the job.
There is another pointto be payed attention to: Try to use high gain
verticals, like the ones from diamond, for VHF/UHF. Sometimes the
reflections arrive from different sides at the same time. With a high gain
beam you could miss the most of them, or even cannot tell the direction
where they are coming from.

Please specify the expression "Decametric" in frequency/MHz terms. There are
too many of different bands to be included in this aerea of spectrum.

73 de OE8SOQ
Helmut

BTW, nice place to put up a station!
"Bernard Brun" <info@bouquetin.com> schrieb im Newsbeitrag
news:cc0hpg$c28$1@news-reader3.wanadoo.fr...
| Hello,
|
|
|
| I am interested by all experiments concerning the installation and the
type
| of antennas to be used for a station located in mountain. Decametric band
| and VHF.If possible !
|
|
|
| Situation:
|
| French Alps
|
| 1.300 meters of altitude.
|
| QTH : 45ï¿½ 27' 24" North - 6ï¿½ 41' 56" East
|
| Locator JN35IK
|

|
|
| Mask in the north located at 1.000 m. far, altitude 2.300 m.
|
| Mask in the south located at 4.500 m. far, altitude 2.300 m.
|
| Mask in the west located at 3.000 m. far, altitude 1.800 m.
|
| Mask in the East located at 1.500 m. far, altitude 1.900 m.
|
| Mask in western south located at 8.000 m. far, altitude 2.600 m.
|
|
|
| Have a large ground, possibility of installing any type of material
|
|
| Thanks in advance for any suggestion
|
|
| --
| Bernard Brun
| Info@bouquetin.com
| http://www.bouquetin.com
| Phone : ++33(0) 479 550 113
| Fax : ++33(0) 479 550 476
|
|

10. Re: what justify so high price... nothing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 13:36:59 UTC
From: James <jimbo@nospamforme.com>
Message-ID: <40E4137A.4E09557B@nospamforme.com>
Source record: 92781
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

I believe one thing that drives up the prices on all this mil grade equipment
is requirments for measured drawings so these things can be repaired or
replaced
when in service. For example on ship or sub there is machine shops to fix
things
or fabricate replacement parts.

If they put $ 600 toilet seats in b1 bombers, wonder how much the ones
in the White House or AF-1 cost ?

jimbo

Ed wrote:

> Why are you picking on Haliburton? You think they are the only ones
> doing this? Don't you remember the $600 toilet seats and $75 hammers from
> decades ago? ....
>
> <grin>
>
> Ed

11. Re: what justify so high price... nothing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 13:38:07 UTC
From: James <jimbo@nospamforme.com>
Message-ID: <40E413BE.3EE638C3@nospamforme.com>
Source record: 92782
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

Not only the cushcrafts, but have you seen the prices
for Viagra in Canada ??

jimbo

Butch wrote:

> Now wait a minute Dave, what about all those Republican capitalist
> infidels and the offshore accounts? That thread was just great! You're
> just gonna let it go with this explanation, "please note: (sic) canadian
> funds?" You could have thrown in some Rooskie Mafia and islamic
> terroids, and all kinds of stuff that would improve the explanation on
> why it costs us, the American Taxpayer, more money for them damn Cushcrafts!
>
> Butch
>
> Dave Holford wrote:
> >
> > Thierry wrote:
> >
> >>Hi,
> >>
> >>Compare these prices for the Cuschcraft MA5B :
> >>http://www.durhamradio.com/cushcraft-ma5b.htm $599
> >>
> >>http://www.chq-inc.com/asp/details.asp?mod=MA5B&man=cush, less than $400
> >>
> >>The first deny any eplanations, so someone could help me to understand why
> >>Keith sold this antenna at such a price...
> >>
> >>Thanks in advance.
> >>
> >>73
> >>Thierry
> >
> >
> >
> >
> > Look at the Durham Radio home page - It states clearly (in red yet)
> >
> > "Please Note: Unless otherwise stated,
> > all prices are listed in Canadian Funds."
> >
> > 400USD is pretty close to 600Can.

> >
> > Dave

12. Re: Antenna in mountain

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 14:07:03 UTC
From: Bernard Brun <info@bouquetin.com>
Message-ID: <cc15qa$jm8$1@news-reader5.wanadoo.fr>
Source record: 92783

Bonjour,

Thank your for your answer

Decametric : 3,5 7, 10, 14, 21 ,18, 21, 28, MHz

Kind regards,
--
Bernard Brun
Chalets du Bouquetin - R&#65533;sidence de Tourisme ****
Parc National de la Vanoise
Paradiski, domaines skiables de la Plagne & des Arcs
http://www.bouquetin.com
Phone : ++33(0) 479 550 113
Fax : ++33(0) 479 550 476

13. Packet Radio Bulletins

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 14:17:54 UTC
From: Ken Williams <gw3tmh@gb7abc.net>
Message-ID: <cc16edcpn1@news7.svr.pol.co.uk>
Source record: 92784
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx

```
You can read all the latest packet radio bulletins at www.hamserv.net

--
Ken Williams

http://www.gb7abc.net
```

14. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 16:28:36 UTC
From: cva <bn@art.com>
Message-ID: <cc1dup0ue1@enews1.newsguy.com>
Source record: 92785

Bill Turner wrote:

>That would be "makes" etc, etc, look stupid.
>
>Got a mirror?
>
>
>
go ahead and look in the mirror you stupid bush supporter.
we have a war on terrr. the enemy is at our doorstep. we must
defeat that enemy. fuck you bush you digusting coward. send
your daughters to iraq.

too bad a simple boy like you has to resort to spelling correction
cause ya have no brains to formulait a argumment. keep that spellin
correctin program handy. keep on suckin bush cock.

15. Re: Antenna in mountain

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 17:10:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a0e8e01r1cjcbf32gb3vmbeq0ald2rbevc@4ax.com>
Source record: 92786

Hi Guys,

On Thu, 1 Jul 2004 14:30:28 +0200, "Helmut" <MyCallSign@qsl.net>
wrote:

>Bernhard,
>
>Please keep in mind, that VHF and UHF do verry much reflect from your
>surrounding "masks", and you would not believe what is possible to reach
>without line of sight.

Although my situation may not be "Alpine," I do live between two
mountain ranges in hilly country (terrain varies 200M through many
river valleys). To the East are the Cascade Range with more than the
average density of Volcanos (think Mt. St. Helens or Mt. Ranier, or
Mt. Hood, or ,,,) which stand in the 4000M area. However, they are
exceptions to the general rule, because the surrounding Cascades are
rather smaller at maybe half to 2/3rds those big guns.

To the west we have the Olympic Mountain Range which are on par with
the Cascades for height. Living between them, my friend often find
they can get better contacts by aiming their beams 180ï¿½ to their
target because there is a small hill in the way and the reflections
off the mountains behind give more than enough signal.

There is also the phenomenon of knife edge diffraction that occurs at
these hill's peaks or ridges. Myself, I live behind a hill that
interferes with my buddy's repeater. I live at 100M above sea level
(Puget Sound), the hill rises to 150M and masks the repeater antenna.
I use RadioMobile software to map the geographic distribution of RF:
http://www.qsl.net/aa7uj/
or
http://www.qsl.net/aa7uj/coverage/10m-1uv.jpg
which is one of several footprints, this one being the 1 ï¿½V
sensitivity service area (shown in orange) for the 10M repeater.

Now, if the concern is with HF bands, then that is probably more a
concern of DX coverage (not suited to RadioMobile as it is principally
line of sight oriented). There I use VOAWIN which is a gargantuan and
very busy propagation modeler. An example of this is found at:
http://www.qsl.net/kb7qhc/propagation/index.htm

The first pass analysis of how much terrain impacts your signal can be
evaluated by simply looking at the peaks. How many degrees above the
horizontal do they rise? If less than 10ï¿½ then no big deal. If more
than 50ï¿½ then you must be living in a cave (most slopes are rarely

steeper than 20-30ï¿½). I must say there are exceptions like deep valleys. Last week I was in the Royal Gorge that is 400M deep and maybe 100M wide.

73's
Richard Clark, KB7QHC

16. Re: best antenna over a carport?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 19:35:52 UTC
From: "H. Adam Stevens" <mayaone@earthlink.net>
Message-ID: <sIZEc.1491$oD3.867@newsread1.news.pas.earthlink.net>
Source record: 92787

```
"The Eternal Squire" <eternalsquire@comcast.net> wrote in message
news:904dab11.0406302017.1aa9ae1c@posting.google.com...
> Mike Luther <mike.luther@ziplog.com> wrote in message
news:<10e5l6jbn1897c8@corp.supernews.com>...
> > And for nostalgia with Hemingway antenna .. chuckle ..
> >
> > H. Adam Stevens, NQ5H wrote:
> >
> > >"Tdonaly" <tdonaly@aol.com> wrote in message
> > >news:20040629220728.29691.00000700@mb-m18.aol.com...
> > >
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> > >>H wrote,
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> > >>>longwire
> > >>>ground to biggest conductor nearby
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> > >>>I dare not attempt construction of sentences comparable to Richard's,
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> > >>
> > >>>thought I'd just get to the point.
> > >>>73 es gud dx
> > >>>H.
> > >>>NQ5H
> > >>>
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> > >>Reminds me of Hemingway.
> > >>73,
> > >>Tom Donaly, KA6RUH
> > >>
> > >>
> > >>
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> > >With his best bourbon.
> > >tnx es 73
> > >de
```

> > >NQ5H
> > >
> > >
> > >
> > >
> > >
> > >Why did the chicken cross the road?
> > >
> > >To die.
> > >In the rain.
> > >
> > >
> > >
> > >
> > Use Hemingray insulators!
> >
> > ;)
>
>
> Golly gee, and I thought the chicken crossed the road because he
> failed to make Low Earth Orbit!

aww that's just Earnest's rendition

17. Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 19:43:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc1pg6$5c4$1@hercules.btinternet.com>
Source record: 92788

I am writing a program involving an antenna plus two coupled tuned circuits plus a matched simple receiver.

I would like to know, crudely, the audio power input level to 2000-ohm, iron diaphragm headphones for a nice, comfortable, not too difficult listening level. Such as when the phones are used on a crystal and cat's whisker radio receiver.

Such headphones are more sensitive than modern 8-ohm varieties. I have a pair of 2000-ohm headphones but unfortunately no means of measuring power or voltage input.

Just the number of micro-watts please. At what low power input level does speech or music just BEGIN to fade out to a person of normal hearing? Any ideas? I could take the average of a few replies.

Reg, G4FGQ

18. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 20:43:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qrr8e0plt5732cj7f66gr672hkee4cupee@4ax.com>
Source record: 92789

On Thu, 1 Jul 2004 19:43:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>I am writing a program involving an antenna plus two coupled tuned circuits
>plus a matched simple receiver.
>
>I would like to know, crudely, the audio power input level to 2000-ohm, iron
>diaphragm headphones for a nice, comfortable, not too difficult listening
>level. Such as when the phones are used on a crystal and cat's whisker
>radio receiver.

Odd, I was just corresponding over this very matter recently.

>Such headphones are more sensitive than modern 8-ohm varieties. I have a
>pair of 2000-ohm headphones but unfortunately no means of measuring power or
>voltage input.

Then we step into the area of conjecture.

>Just the number of micro-watts please. At what low power input level does
>speech or music just BEGIN to fade out to a person of normal hearing? Any
>ideas? I could take the average of a few replies.

Hi Reg,

This will be have to be done through inference or Web research. As
far as inference goes, I will first state that magnetic speaker
efficiency is extremely poor, but I don't know if this extends to the
headphone implementation. Albeit, between 1 and 10% efficient.

The level of hearing for a child or teen fades out at 1db re
environmental impositions. Technically, in the absence of other
sounds:
1dB re 200ï¿½Dynes per cMï¿½ at 1KHz

0dB = 200ï¿½Dynes per cMï¿½ = 0.1 femtoWatt per cMï¿½

a quiet whisper = 6 femtoWatts per cMï¿½

conversation at 1M = 1 nanoWatt per cMï¿½

Hearing at another frequency such as 400Hz (common sidetone for CW) is
10dB weaker (hearing peaks about 5dB in the 2-4KHz region) and worsens
as frequency lowers.

Hearing loss in the 50-59 Age group for men at 1KHz is about 10dB

Given "hearing" is subjective, a technical response is only as
accurate as the knowledge of these variables (age, sex, frequency,

efficiency).

73's
Richard Clark, KB7QHC

19. Re: FM arial help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 20:54:28 UTC
From: FB <calumnospam@mandalay8.freeserve.co.uk>
Message-ID: <cc1tm3$8jh$1@sparta.btinternet.com>
Source record: 92790

Thanks will give it a try

Calum

"Crazy George" wrote

> Calum:
>
> You can try it, it won't hurt anything, but the TV antenna is for UHF
unless
> it is very old, and since FM is a longer wavelength (VHF), it needs a
larger
> antenna. On the other hand, just having some metal in the attic may work
> better than the present antenna. Give it a try, and if it is
> unsatisfactory, replace the TV antenna with a FM antenna.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address

20. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 21:06:10 UTC
From: "H. Adam Stevens" <mayaone@earthlink.net>
Message-ID: <61%Ec.1536$oD3.1518@newsread1.news.pas.earthlink.net>
Source record: 92791

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cc1pg6$5c4$1@hercules.btinternet.com...
> I am writing a program involving an antenna plus two coupled tuned
circuits
> plus a matched simple receiver.
>
> I would like to know, crudely, the audio power input level to 2000-ohm,
iron
> diaphragm headphones for a nice, comfortable, not too difficult listening
> level. Such as when the phones are used on a crystal and cat's whisker
> radio receiver.
>
> Such headphones are more sensitive than modern 8-ohm varieties. I have a
> pair of 2000-ohm headphones but unfortunately no means of measuring power
or
> voltage input.
>
> Just the number of micro-watts please. At what low power input level does
> speech or music just BEGIN to fade out to a person of normal hearing? Any
> ideas? I could take the average of a few replies.
> ----
> Reg, G4FGQ
>
>
Hi Reg
I can report using Sennheiser hi impedance dynamic phones to monitor 600 ohm
balanced
broadcast audio signals and you couldn't hear the phones touch the wiring
tree at the TV station.
The signal qualified as a good listening level as I recall.
The phones I used with my crystal set when I was a kid were ceramic.
Surely a Google or two would prove productive.
73
H.
NQ5H

21. Re: Outbacker Perth grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 21:11:08 UTC
From: "Bruce W.1" <bw@noDirectEmail.com>
Message-ID: <S5%Ec.25590$WI2.1846@lakeread05>
Source record: 92792

JGBOYLES wrote:
>
>
> The Outbacker or the Hamstick are not usually fed with 300 ohm line. I have
> never used either, but it is my understanding they are both designed for mobile
> operation and a 50 ohm feed.
> If you are planning to transmit with the Outbacker fed with 300 ohm line you
> will need a Balanced Antenna Tuner at the shack. Even with this arrangement, I
> would not expect very good results because of ground losses and a low radiation
> resistance at the antenna input. You will be feeding a very unbalanced antenna
> with a balanced transmission line. My suggestion would be to feed the antenna
> with 50 ohm coax, and adjust the antenna for the best match at the transmitter.
> And yes, you will still need to connect the antenna ground jack to some sort
> of ground.
> 73 Gary N4AST
==========

So the ground jack is needed for matching. I thought that might be the
case.

The 300 ohm feedline was connected to an antenna tuner.

Well I completed installing the antenna and it didn't work for sh*t. So
I tore it down. Chalk one up to experience.

Thanks guys.

22. Any tips on GPA-50 hf vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 21:26:00 UTC
From: Jack PE2JV <pe2jv@amsat.org>
Message-ID: <52dff$40e48e7c$d47fabd4$21071@news.multikabel.nl>
Source record: 92793

Hello,
I recently obtained a almost new GPA-50 hf vertical. Now before
i am placing it in a mast/roof there may be fellow hams with tips
about weather proofing or adjusted radials etc. If any please let
me know. Thanks.
Jack. PE2JV.

23. Re: what justify so high price... nothing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 21:29:18 UTC
From: Tim Wescott <tim@wescottnospamdesign.com>
Message-ID: <10e90hed4tak089@corp.supernews.com>
Source record: 92794
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,uk.radio.amateur

James wrote:

> I believe one thing that drives up the prices on all this mil grade equipment
> is requirments for measured drawings so these things can be repaired or
> replaced
> when in service. For example on ship or sub there is machine shops to fix
> things
> or fabricate replacement parts.
>
> If they put $ 600 toilet seats in b1 bombers, wonder how much the ones
> in the White House or AF-1 cost ?
>
> jimbo
>
> Ed wrote:
>
>
>> Why are you picking on Haliburton? You think they are the only ones
>>doing this? Don't you remember the $600 toilet seats and $75 hammers from
>>decades ago? ....
>>
>> <grin>
>>
>> Ed
>
>

I know someone who used to work at Boeing. That $600 toilet seat came about because after the airplane was designed the Air Force came back with a requirement that necessitated (a) a total redesign of the whole interior of the aircraft or (b) narrowing the lav to the point where a stock seat from a 747 wouldn't fit anymore. $600 per seat was cheaper than ripping the whole thing out and redoing it.

The other thing that drives the price up on mil grade equipment is that there's not much of it made. When you are Ford and can count on making 100,000 cars a year you can spend a _lot_ of money on engineering, because it'll be divided by 100,000 when you figure the price of the car. When you're Raytheon and you can only count on selling 100 systems before you need to make something different it would cost the customer many more $$ to engineer the production cost down than it does to just build things stout enough to work without worry.

--

Tim Wescott
Wescott Design Services
http://www.wescottdesign.com

24. Re: Outbacker Perth grounding question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 21:30:12 UTC
From: jgboyles@aol.com
Message-ID: <20040701173012.05775.00000922@mb-m05.aol.com>
Source record: 92795

>Well I completed installing the antenna and it didn't work for sh*t. So
>I tore it down. Chalk one up to experience.
>

Hi Bruce, Don't give up just yet. A 25' dipole fed with 300 ohm line and a tuner will work well on 20m-6m. If you could manage 50', then you have 40m. An inverted vee configuration requires only one support. A dipole costs very little and will work great compared to what you were attempting.
73 Gary N4AST

25. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 22:18:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc22ji$h4f$1@sparta.btinternet.com>
Source record: 92796

Rich, why don't you say you don't know. ;o)

Reg.

26. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 22:57:11 UTC
From: jgboyles@aol.com
Message-ID: <20040701185711.05811.00000977@mb-m05.aol.com>
Source record: 92798

>I would like to know, crudely, the audio power input level to 2000-ohm, iron
>diaphragm headphones for a nice, comfortable, not too difficult listening
>level. Such as when the phones are used on a crystal and cat's whisker

Hi Reg, Don't know either, but if you have access to a scope and a signal generator, you could find out what you want. I have these, but not some 2000 ohm phones.
When I was a child playing around with crystal sets, I listened to a 1KW AM station about 1 KM away with a 25' wire, a germanium diode, and a 1000 ohm crystal earphone. The diode drop would be around 250 millivolts, and the listening level would be fine. Thats 250 mv into 1000 ohms. Ther are several crystal radio web sites that may provide more help.
73 Gary N4AST

27. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-01 23:44:01 UTC
From: "owen.home" <owen.home@ntlworld.com>
Message-ID: <5l1Fc.427$xd6.219@newsfe3-gui>
Source record: 92797

Reg
I used to carry a pair of old military headphones in my kit when building broadcast installations until they were nicked by some ****, I dont think they were as high as 2k but they were not low Z so probably 600ohms and very sensitive, they were handy to listen to one-legged or crossed pairs and crosstalk in circuits etc. I put them across the low impedance output of an audio generator one day and even my aged ears could just hear -60dBm i.e. wrt 775mV (so really dBu in broadcast speak) - that's microphone level! I couldn't vouch to a comfortable level of speech etc but I reckon the answer to your question must lie in the single figure microwatt level for the most sensitive sets.
Hope this helps
John
MW1FGQ (pure coincidence, I didn't choose)

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:cc1pg6$5c4$1@hercules.btinternet.com...
> I am writing a program involving an antenna plus two coupled tuned circuits
> plus a matched simple receiver.
>
> I would like to know, crudely, the audio power input level to 2000-ohm, iron
> diaphragm headphones for a nice, comfortable, not too difficult listening
> level. Such as when the phones are used on a crystal and cat's whisker
> radio receiver.
>
> Such headphones are more sensitive than modern 8-ohm varieties. I have a
> pair of 2000-ohm headphones but unfortunately no means of measuring power or
> voltage input.
>
> Just the number of micro-watts please. At what low power input level does
> speech or music just BEGIN to fade out to a person of normal hearing? Any
> ideas? I could take the average of a few replies.
> ----
> Reg, G4FGQ
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.713 / Virus Database: 469 - Release Date: 30/06/04

28. Looking for information on VHF impedance measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 00:26:01 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <tY1Fc.22294$x9.21777@nwrddc02.gnilink.net>
Source record: 92799

In a recent thread on VHF impedance measurement, it was indicated that VK2ZAB had instructions for building an impedance meter. I have acquired all the parts needed for constructing a meter described in ZABs article. But, I am confused about how to operate it when/if the meter gets finished. I'd sure like to corespond with someone who has built and/or used one of these meters.

Jerry

29. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 00:44:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7gb9e0huvfqgufnnlqgtvieh2f39s2lldq@4ax.com>
Source record: 92800

On Thu, 1 Jul 2004 22:18:27 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Rich, why don't you say you don't know. ;o)
>---
>Reg.
>
On Thu, 01 Jul 2004 20:43:37 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

> I don't know

Hi Reggie,

What if I said 43?

Do you actually read responses to your questions? Let's see, there's
enough numbers in it to satisfy lord kelvinator, and enough principle
in it to make sir plushbottom happy, and it even contains the
structure of another unzipped program.

Too demeaning to say thank you, hmmmm?

88's
Richard Clark, KB7QHC

30. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 01:18:01 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <gld9e014aj8b0a6elk5kl08mldod6c10fh@4ax.com>
Source record: 92801

On Thu, 01 Jul 2004 09:28:36 -0700, cva <bn@art.com> wrote:

>Bill Turner wrote:
>
>>That would be "makes" etc, etc, look stupid.
>>
>>Got a mirror?
>>
>>
>>
>go ahead and look in the mirror you stupid bush supporter.
>we have a war on terrr. the enemy is at our doorstep. we must
>defeat that enemy. fuck you bush you digusting coward. send
>your daughters to iraq.
>
>too bad a simple boy like you has to resort to spelling correction
>cause ya have no brains to formulait a argumment. keep that spellin
>correctin program handy. keep on suckin bush cock.

As I have said over and over again, the commies are haters, pure and simple. Nothing comes out of them but venom, spite and treason. They have no better ideas nor even good ones. Go ahead, make some real, cogent, thought-out solutions for some real-world problems like keeping terrorism away from our children. You won't however; you will only answer with more leftist poison.

Russ

31. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 01:55:15 UTC
From: Nick Kennedy <wa5bdu@yahoo.com>
Message-ID: <10e9g7f1tjhki78@corp.supernews.com>
Source record: 92802

I get 0.084 u-watts.

Your post inspired me to go to the attic and look for my antique phones again. Found 'em, this time. They are iron diaphragm, engraved on the back "Cannonball Dixie, E.F. Cannon Co., Springwater, N.Y., U.S.A"

I measured the resistance of each can at a little over 1000 ohms. I suspect their Z is mainly R.

I have an old tube type Heathkit audio generator. I measured the voltage at the 0 dB mark with my scope, verified that the voltage division per step is as marked, and cranked it to minus 50 dB, as low as it would go. The sound was clearly audible but not strong. I'm 55 with normal hearing for my age. Even after 700 CW QSOs on Field Day. So anyway, I figured 0.0092 volts rms into 1000 ohms (only driving one can) gives me 0.084 uW. That's amazing.

The phones still showed the effects of my botched attempt to solder on a 1/4 inch stereo phone plug. The fabric covered "wire" is itself mostly fabric--just string with a fragile strand of copper spiraled around it. Not solderable at all. Next time I'll crimp lugs to it instead.

Now it's time to build that crystal set, and/or regen receiver.

73--Nick, WA5BDU
in Arkansas

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:cc1pg6$5c4$1@hercules.btinternet.com...
> I am writing a program involving an antenna plus two coupled tuned circuits
> plus a matched simple receiver.
>
> I would like to know, crudely, the audio power input level to 2000-ohm, iron
> diaphragm headphones for a nice, comfortable, not too difficult listening
> level. Such as when the phones are used on a crystal and cat's whisker
> radio receiver.
>
> Such headphones are more sensitive than modern 8-ohm varieties. I have a
> pair of 2000-ohm headphones but unfortunately no means of measuring power or
> voltage input.
>
> Just the number of micro-watts please. At what low power input level does
> speech or music just BEGIN to fade out to a person of normal hearing? Any
> ideas? I could take the average of a few replies.

> ----
> Reg, G4FGQ
>
>

32. Re: Looking for information on VHF impedance measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 04:26:00 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <st5Fc.11168$wY5.9000@attbi_s54>
Source record: 92803

This impedance meter is based on SM6MOM's winning entry in the RF Design Magazine contest in 1986. As I pointed out to the then editor of the magazine, the exact same impedance meter was described in the Proceedings of the IRE in 1947. You might want to read the article by the original inventor (I believe his name was Samuels and the title is something like "A Oscillographic Method of Impedance Measurement".)

Rick N6RK

"Jerry Martes" <j.jmartes@verizon.net> wrote in message news:tY1Fc.22294$x9.21777@nwrddc02.gnilink.net...
> In a recent thread on VHF impedance measurement, it was indicated that
> VK2ZAB had instructions for building an impedance meter. I have acquired
> all the parts needed for constructing a meter described in ZABs article.
> But, I am confused about how to operate it when/if the meter gets finished.
> I'd sure like to corespond with someone who has built and/or used one of
> these meters.
>
> Jerry
>
>

33. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 04:33:37 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <40E4E5AA.B148DA29@shaw.ca>
Source record: 92804

Reg Edwards wrote:
>
> I am writing a program involving an antenna plus two coupled tuned circuits
> plus a matched simple receiver.
>
> I would like to know, crudely, the audio power input level to 2000-ohm, iron
> diaphragm headphones for a nice, comfortable, not too difficult listening
> level. Such as when the phones are used on a crystal and cat's whisker
> radio receiver.
>
> Such headphones are more sensitive than modern 8-ohm varieties. I have a
> pair of 2000-ohm headphones but unfortunately no means of measuring power or
> voltage input.
>
> Just the number of micro-watts please. At what low power input level does
> speech or music just BEGIN to fade out to a person of normal hearing? Any
> ideas? I could take the average of a few replies.
> ----
> Reg, G4FGQ

EH? WHAT DID HE SAY? :-)

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

34. Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 05:42:24 UTC
From: /* frank */ <__frank__@despammed.com>
Message-ID: <2kkam0F36l0lU1@uni-berlin.de>
Source record: 92805

I can install only a dipole of about 10 meters
(as inverted V).

Is there any project, any commercial antenna
of such length, that allow me to work all band
7 - 14 - 21 - 28 MHz ?

Thanks

35. Re: Looking for information on VHF impedance measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 05:45:50 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <iE6Fc.26612$DT5.16421@nwrddc03.gnilink.net>
Source record: 92806

Thanks Richard
ManOMan - This stuff gets complex. I dont have a VHF sweep signal
generator. I suspect graphic display requires a sweep signal generator.
I once owned a 1947 Proceedings of The IRE. I tossed all my "magazines"
long ago. I wish I could have known. I'd have saved that one (thats a
funny)

The instructions I read for the single frequency method with the 1/8th
lambda coaxs, indicates that the meter reads 80+j12 when the terminal is
loaded with 60+j50. Thats probably OK, but it would sure confuse me.
But, since I beleive the guy who wrote this article is smarter than I am,
I would just like to get some of my confusion cleared up.

In the mean time, I'll go try to dig up "Samuels's" article. Who knows,
maybe I'll learn something.

Jerry

"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
news:st5Fc.11168$wY5.9000@attbi_s54...
> This impedance meter is based on SM6MOM's winning entry in the RF Design
> Magazine contest in 1986. As I pointed out to the then
> editor of the magazine, the exact same impedance meter was described
> in the Proceedings of the IRE in 1947. You might want to read the
> article by the original inventor (I believe his name was Samuels and the
> title is something like "A Oscillographic Method of Impedance
Measurement".)
>
> Rick N6RK
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:tY1Fc.22294$x9.21777@nwrddc02.gnilink.net...
> > In a recent thread on VHF impedance measurement, it was indicated that
> > VK2ZAB had instructions for building an impedance meter. I have
acquired
> > all the parts needed for constructing a meter described in ZABs article.
> > But, I am confused about how to operate it when/if the meter gets
> finished.
> > I'd sure like to corespond with someone who has built and/or used one of
> > these meters.
> >
> > Jerry
> >
> >
>

>

36. Re: Any tips on GPA-50 hf vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 06:55:25 UTC
From: Thomas Krull <df1hx@t-online.de>
Message-ID: <cc30st$3ev$1@df1hx.dialin.t-online.de>
Source record: 92807

Hi !

Jack PE2JV wrote:

> Hello,
> I recently obtained a almost new GPA-50 hf vertical. Now before
> i am placing it in a mast/roof there may be fellow hams with tips
> about weather proofing or adjusted radials etc. If any please let
> me know. Thanks.
> Jack. PE2JV.

I am using the GPA-50 since about two years and i am very pleased with it, my landlord does not allow to set up a beam and i do not have the space to set up wire dipoles.
The GPA-50 covers 10,15,20,40 and 80 meters but not the WARC bands.
On 10,15 and 20 it uses the included 1/4 wave counterpoises, on 40 the included dipole, shortened with the loading coils and on 80 you need to set up a counterpoise yourself i.e. metal roof or large sheet of chicken wire, the larger the counterpoise on 80 the better.
I have the GPA-50 on a two meter mast at the courner of my penthouse patio, the 1/4 wave radials running to the edge of the roof at an angle of 90 degrees, so i can walk/use the patio beneath them. SWR on 10 to 20 meters is abt. 1:1,2 a little higher at the edges of the bands. I did not cut the radials at all.
The 40 meter dipole is a little tricky since it tends to get "disturbed" by metal close by i.e. metal roof. After setting it up the SWR was infinite. I got it to 1:3 by cutting small pieces from both legs similar. However since i have some metal close by i did not get it below 1:3 but the built in tuner of my radio takes care of that without any problems. I did not expect the dipole working well, however at nighttime and good conditions i am able to work JA with 50 watts from here (North Germany) in CW.
If you have a metal roof try to connect that as counterpoise on 80 otherwise you will have to fiddle with chicken wire or many unbalanced wire counterpoises.
I connected a copper rail running arround the house at the floor of my patio and it works quite well on 80 meters. I tuned the antenna to SWR 1:1 at the middle of the band by adjusting the tip at the top of the antenna. However the range of "good" SWR on 80 is very small so i have to use the tuner of the radio again when QSY'ing on the 80 meter band.
BTW i am located in the 5th floor of the house so the location of the GPA-50 is quite high from the ground.
The antenna gives my quite good results running barefoot only (100 Watts) on DX and with 10 Watts from my IC-703 i can work Europe with reports ranging from S7 to S9+ on 20 meters if conditions are not too bad.

73s and gl, thomas [DF1HX]
--
Thomas Krull [DF1HX] df1hx@t-online.de
gpg (GnuPG) 1.2.4 0x01EC2546

37. Re: Antenna in mountain

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 08:51:43 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <0akfr1-6jb.ln1@p400bob.lse.com.au>
Source record: 92808

Bernard

I sent you a 145MHz and 30MHz propagation study to the email address at
the foot of your post

I hope you got it..

Cheers Bob VK2YQA

Bernard Brun wrote:
> Hello,
>
>
>
> I am interested by all experiments concerning the installation and the type
> of antennas to be used for a station located in mountain. Decametric band
> and VHF.If possible !
>
>
>
> Situation:
>
> French Alps
>
> 1.300 meters of altitude.
>
> QTH : 45ï¿½ 27' 24" North - 6ï¿½ 41' 56" East
>
> Locator JN35IK
>
>
>
> Mask in the north located at 1.000 m. far, altitude 2.300 m.
>
> Mask in the south located at 4.500 m. far, altitude 2.300 m.
>
> Mask in the west located at 3.000 m. far, altitude 1.800 m.
>
> Mask in the East located at 1.500 m. far, altitude 1.900 m.
>
> Mask in western south located at 8.000 m. far, altitude 2.600 m.
>
>
>
> Have a large ground, possibility of installing any type of material

>
>
> Thanks in advance for any suggestion
>
>

38. QUESTION & REQ: Real Audio Radio Recorder with Schedule/Timer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 10:56:41 UTC
From: Kinsey 6 <kinsey6@somewhere.outthere.com>
Message-ID: <Xns951A46AAA5AB0kinsey6@65.32.1.7>
Source record: 92809

Alright. I don't know what I'm looking for at all, so I figured I would ask all of you. There is this streaming real audio radio show I want to record. It is on weekdays from noon until 3pm, but I have no idea what program I should get to record it on a schedule.

Any guidance would be great. Thanks.

Kinsey6

39. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 11:17:59 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ctadnXjZEPT12XjdRVn-gw@crocker.com>
Source record: 92810

"/* frank */" <__frank__@despammed.com> wrote in message
news:2kkam0F36l0lU1@uni-berlin.de...
> I can install only a dipole of about 10 meters
> (as inverted V).

sure, go for it!

>
> Is there any project, any commercial antenna
> of such length, that allow me to work all band
> 7 - 14 - 21 - 28 MHz ?

just put one up, add a tuner if your radio doesn't have one, and get on the air! it will work fine, cover all bands from dc to daylight, is cheap, easy to use, whitens your teeth while you transmit, and is non-fattening. don't go pay anyone for it, just grab some wire and (horrors upon horrors) build it yourself.

oh, and ignore the inevitable discussion that will follow shortly about why you have to use open wire feeders instead of coax, endless debate about swr, tuning, reflections, losses, matching, etc, etc, etc... stop reading now and go get on the air!

40. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 11:31:16 UTC
From: Peter Parker <parkerp@NOSPAMalphalink.com.au>
Message-ID: <40e546b6@news.alphalink.com.au>
Source record: 92811

"/* frank */" <__frank__@despammed.com> wrote in message
news:2kkam0F36l0lU1@uni-berlin.de...
> I can install only a dipole of about 10 meters
> (as inverted V).
>
> Is there any project, any commercial antenna
> of such length, that allow me to work all band
> 7 - 14 - 21 - 28 MHz ?

A very good antenna is a half-sized G5RV (7.5m each side). Excellent
results 7 - 28 MHz. Use tuned feeders (any length) and ATU.

73, Peter

41. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 12:43:32 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <fqlae0pp07e5igojh1tgdq05rkp5ioctmq@4ax.com>
Source record: 92812

On Fri, 02 Jul 2004 07:42:24 +0200, /* frank */
<__frank__@despammed.com> wrote:

>I can install only a dipole of about 10 meters
>(as inverted V).
>
>Is there any project, any commercial antenna
>of such length, that allow me to work all band
>7 - 14 - 21 - 28 MHz ?
>
>Thanks

If you can make it 11 meters long, about 33 feet, that should get you
14 thru 28 mhz, with the use of 450 ohm feedline and a manual tuner.
If you can stretch it to 51 feet, you can add 10 and 7 mhz.

bob
k5qwg

42. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 12:59:17 UTC
From: "Dee D. Flint" <deeflint01@comcast.net>
Message-ID: <No6dnfdTCbxmwXjdRVn-tw@comcast.com>
Source record: 92813

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:fqlae0pp07e5igojh1tgdq05rkp5ioctmq@4ax.com...
> On Fri, 02 Jul 2004 07:42:24 +0200, /* frank */
> <__frank__@despammed.com> wrote:
>
> >I can install only a dipole of about 10 meters
> >(as inverted V).
> >
> >Is there any project, any commercial antenna
> >of such length, that allow me to work all band
> >7 - 14 - 21 - 28 MHz ?
> >
> >Thanks
>
> If you can make it 11 meters long, about 33 feet, that should get you
> 14 thru 28 mhz, with the use of 450 ohm feedline and a manual tuner.
> If you can stretch it to 51 feet, you can add 10 and 7 mhz.
>
> bob
> k5qwg
>
>

10 meters = 32.8 feet
11 meters = 36.1 feet

A meter is approximately 3 feet and 3 inches NOT just 3 feet. Those inches
add up after a while.

Dee D. Flint, N8UZE

43. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 13:39:59 UTC
From: Harry Whitfield <g6auc@invalid.net>
Message-ID: <020720041439597727%g6auc@invalid.net>
Source record: 92814

In article <cc1pg6$5c4$1@hercules.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote:

> I am writing a program involving an antenna plus two coupled tuned circuits
> plus a matched simple receiver.
>
> I would like to know, crudely, the audio power input level to 2000-ohm, iron
> diaphragm headphones for a nice, comfortable, not too difficult listening
> level. Such as when the phones are used on a crystal and cat's whisker
> radio receiver.
>
> Such headphones are more sensitive than modern 8-ohm varieties. I have a
> pair of 2000-ohm headphones but unfortunately no means of measuring power or
> voltage input.
>
> Just the number of micro-watts please. At what low power input level does
> speech or music just BEGIN to fade out to a person of normal hearing? Any
> ideas? I could take the average of a few replies.

Test with S G Brown Type F Headphones (display with monospace font)

using sine-wave generator, counter and ac voltmeter.

Frequency 400Hz 700Hz 1000Hz 2500Hz

V (rms)

1.015 ---- ----- ---- Loud

0.340 Loud Very Very Normal
---- Loud Loud

0.100 Normal Normal Normal Quiet

0.030 Quiet Quiet Quiet Very
Quiet

0.010 Very Very Very -----
Quiet Quiet Quiet

0.003 Threshold ---- ---- Threshold

0.001 ---- Threshold Threshold

Perception of loudness by 66 year young man with normal hearing.

I hope this is of some use.

Harry.

44. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 14:17:27 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <40E56E77.70B733DD@cwis.net>
Source record: 92815

Franj,
Can it be done? Yes. Will it be the 'best' of antennas
on all those bands? No. But, if that's all that you can
do, then do it. Anything is 'better' than nothing! Beware
of antenna manufacturor's claims. Taxes are never going down,
and there's no 'miracle' antennas that do everything...
'Doc

45. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 14:17:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <45WdnYY4A9EV83jdRVn-gQ@crocker.com>
Source record: 92816

don't worry about it... cut it any length you can and use a tuner... it will work all bands from 160m to 6m and probably higher. don't count inches, GET ON THE AIR and have fun!

"Dee D. Flint" <deeflint01@comcast.net> wrote in message news:No6dnfdTCbxmwXjdRVn-tw@comcast.com...
>
> "Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
> news:fqlae0pp07e5igojh1tgdq05rkp5ioctmq@4ax.com...
> > On Fri, 02 Jul 2004 07:42:24 +0200, /* frank */
> > <__frank__@despammed.com> wrote:
> >
> > >I can install only a dipole of about 10 meters
> > >(as inverted V).
> > >
> > >Is there any project, any commercial antenna
> > >of such length, that allow me to work all band
> > >7 - 14 - 21 - 28 MHz ?
> > >
> > >Thanks
> >
> > If you can make it 11 meters long, about 33 feet, that should get you
> > 14 thru 28 mhz, with the use of 450 ohm feedline and a manual tuner.
> > If you can stretch it to 51 feet, you can add 10 and 7 mhz.
> >
> > bob
> > k5qwg
> >
> >
>
> 10 meters = 32.8 feet
> 11 meters = 36.1 feet
>
> A meter is approximately 3 feet and 3 inches NOT just 3 feet. Those
inches
> add up after a while.
>
> Dee D. Flint, N8UZE
>

46. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 14:32:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc3rma$b5v$1@titan.btinternet.com>
Source record: 92817

```
"Harry Whitfield" <g6auc@invalid.net> wrote in message
news:020720041439597727%g6auc@invalid.net...
> In article <cc1pg6$5c4$1@hercules.btinternet.com>, Reg Edwards
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> > I am writing a program involving an antenna plus two coupled tuned
circuits
> > plus a matched simple receiver.
> >
> > I would like to know, crudely, the audio power input level to 2000-ohm,
iron
> > diaphragm headphones for a nice, comfortable, not too difficult
listening
> > level. Such as when the phones are used on a crystal and cat's whisker
> > radio receiver.
> >
> > Such headphones are more sensitive than modern 8-ohm varieties. I have a
> > pair of 2000-ohm headphones but unfortunately no means of measuring
power or
> > voltage input.
> >
> > Just the number of micro-watts please. At what low power input level
does
> > speech or music just BEGIN to fade out to a person of normal hearing?
Any
> > ideas? I could take the average of a few replies.
>
> Test with S G Brown Type F Headphones (display with monospace font)
>
> using sine-wave generator, counter and ac voltmeter.
>
>
> Frequency 400Hz 700Hz 1000Hz 2500Hz
>
> V (rms)
>
> 1.015 ---- ----- ---- Loud
>
>
> 0.340 Loud Very Very Normal
> ---- Loud Loud
>
> 0.100 Normal Normal Normal Quiet
>
```

> 0.030 Quiet Quiet Quiet Very
> Quiet
>
> 0.010 Very Very Very -----
> Quiet Quiet Quiet
>
> 0.003 Threshold ---- ---- Threshold
>
> 0.001 ---- Threshold Threshold
>
>
> Perception of loudness by 66 year young man with normal hearing.
>
> I hope this is of some use.
>
> Harry.

==========

Harry, I couldn't have wished for a better reply.

Except that you forgot to state the DC resistance of the phones. It's the Watts what matters. ;o)

Thanks very much.

Reg, G4FGQ

47. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 14:48:34 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc3sk1$4e7$1@hercules.btinternet.com>
Source record: 92818

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7gb9e0huvfqgufnnlqgtvieh2f39s2lldq@4ax.com...
> On Thu, 1 Jul 2004 22:18:27 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >Rich, why don't you say you don't know. ;o)
> >---
> >Reg.
> >
> On Thu, 01 Jul 2004 20:43:37 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> > I don't know
>
> Hi Reggie,
>
> What if I said 43?
>
> Do you actually read responses to your questions? Let's see, there's
> enough numbers in it to satisfy lord kelvinator, and enough principle
> in it to make sir plushbottom happy, and it even contains the
> structure of another unzipped program.
>
> Too demeaning to say thank you, hmmmm?
>
> 88's
> Richard Clark, KB7QHC

==========
Thank you for what? ;o)

Anyway, what else do you expect from an Italian clown ?

Punchinello, G4FGQ

48. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 15:21:22 UTC
From: Harry Whitfield <g6auc@invalid.net>
Message-ID: <020720041621201719%g6auc@invalid.net>
Source record: 92819

In article <cc3rma$b5v$1@titan.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote:

> "Harry Whitfield" <g6auc@invalid.net> wrote in message
> news:020720041439597727%g6auc@invalid.net...
> > In article <cc1pg6$5c4$1@hercules.btinternet.com>, Reg Edwards
> > <g4fgq.regp@ZZZbtinternet.com> wrote:
> >
> > > I am writing a program involving an antenna plus two coupled tuned
> circuits
> > > plus a matched simple receiver.
> > >
> > > I would like to know, crudely, the audio power input level to 2000-ohm,
> iron
> > > diaphragm headphones for a nice, comfortable, not too difficult
> listening
> > > level. Such as when the phones are used on a crystal and cat's whisker
> > > radio receiver.
> > >
> > > Such headphones are more sensitive than modern 8-ohm varieties. I have a
> > > pair of 2000-ohm headphones but unfortunately no means of measuring
> power or
> > > voltage input.
> > >
> > > Just the number of micro-watts please. At what low power input level
> does
> > > speech or music just BEGIN to fade out to a person of normal hearing?
> Any
> > > ideas? I could take the average of a few replies.
> >
> > Test with S G Brown Type F Headphones (display with monospace font)
> >
> > using sine-wave generator, counter and ac voltmeter.
> >
> >
> > Frequency 400Hz 700Hz 1000Hz 2500Hz
> >
> > V (rms)
> >
> > 1.015 ---- ----- ---- Loud
> >
> >
> > 0.340 Loud Very Very Normal
> > ---- Loud Loud

> >
> > 0.100 Normal Normal Normal Quiet
> >
> > 0.030 Quiet Quiet Quiet Very
> > Quiet
> >
> > 0.010 Very Very Very -----
> > Quiet Quiet Quiet
> >
> > 0.003 Threshold ---- ---- Threshold
> >
> > 0.001 ---- Threshold Threshold
> >
> >
> > Perception of loudness by 66 year young man with normal hearing.
> >
> > I hope this is of some use.
> >
> > Harry.
>
> ==========
>
> Harry, I couldn't have wished for a better reply.
>
> Except that you forgot to state the DC resistance of the phones. It's the
> Watts what matters. ;o)
>
> Thanks very much.
> ----
> Reg, G4FGQ

Reg,

Well, I didn't actually forget - I thought you would know the impedance
of the type F phones. (-:

They appear to be two 2000 ohm earpieces in series, so the impedance is
presumably 4000 ohm.

The DC resistance is 3860 ohm.

I was on the limits of my generator's 50dB attenuation and on the
limits of my voltmeter, so the threshold values are likely to be very
approximate.

We are in the region of 250 pW !

Harry.

49. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 15:25:19 UTC
From: cva <bn@art.com>
Message-ID: <cc3ukt02rg0@enews2.newsguy.com>
Source record: 92820

Russ wrote:

>On Thu, 01 Jul 2004 09:28:36 -0700, cva <bn@art.com> wrote:
>
>
>
>>Bill Turner wrote:
>>
>>
>>
>>>That would be "makes" etc, etc, look stupid.
>>>
>>>Got a mirror?
>>>
>>>
>>>
>>>
>>>
>>go ahead and look in the mirror you stupid bush supporter.
>>we have a war on terrr. the enemy is at our doorstep. we must
>>defeat that enemy. fuck you bush you digusting coward. send
>>your daughters to iraq.
>>
>>too bad a simple boy like you has to resort to spelling correction
>>cause ya have no brains to formulait a argumment. keep that spellin
>>correctin program handy. keep on suckin bush cock.
>>
>>
>
>As I have said over and over again, the commies are haters, pure and
>simple. Nothing comes out of them but venom, spite and treason. They
>have no better ideas nor even good ones. Go ahead, make some real,
>cogent, thought-out solutions for some real-world problems like
>keeping terrorism away from our children. You won't however; you will
>only answer with more leftist poison.
>
>Russ
>
>
Shove you commie leftest crap high up your ass. Bush is a digusting
dictator and should be put on trial for war crimes. Who should be on
trial for war crimes Bush or Saddam? Bush of course.
We need to take back this country from this incompetent jackass....
get universal health care for all Americans, kick out every God Damn

illegal alien, rip up all of those unfair trade agreements and make new ones that favor Americans. Then Bush should apologize to the French.. because THEY were right about the WMDs. Bush has made America the joke of the world. "We have a wor on terrr... the enemy is at oor dorstep.
we must defeat this enemy.. they don't want freedom"" FUCK YOU BUSH you stupid ignorant texas pile of crap.
Health care for EVERY AMERICAN. 260 billion american $ diverted from americans to Iraq. CRIME OF THE CENTURY!!!

50. Re: Looking for information on VHF impedance measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 15:56:04 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <gAfFc.12600$MB3.3307@attbi_s04>
Source record: 92621

This method is a narrow band method. You could sweep over
a narrowband (like an amateur band). What the 1947 article
did was use diode detectors in the square law region connected
to an X-Y scope. The display on the scope is a Smith chart view.
Without a scope, you would use a voltmeter and plot on a
paper Smith chart. I have actually built this and it works,
although it is only as accurate as the squarelaw detectors.

You could also use linear detectors, and use a calculator to
square the number then plot on a paper Smith chart.

I have emailed you a copy of the 1947 paper. (finally remembered
where I stored it).

Rick N6RK

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:iE6Fc.26612$DT5.16421@nwrddc03.gnilink.net...
> Thanks Richard
> ManOMan - This stuff gets complex. I dont have a VHF sweep signal
> generator. I suspect graphic display requires a sweep signal generator.
> I once owned a 1947 Proceedings of The IRE. I tossed all my
"magazines"
> long ago. I wish I could have known. I'd have saved that one (thats a
> funny)
>
> The instructions I read for the single frequency method with the 1/8th
> lambda coaxs, indicates that the meter reads 80+j12 when the terminal is
> loaded with 60+j50. Thats probably OK, but it would sure confuse me.
> But, since I beleive the guy who wrote this article is smarter than I
am,
> I would just like to get some of my confusion cleared up.
>
> In the mean time, I'll go try to dig up "Samuels's" article. Who
knows,
> maybe I'll learn something.
>
> Jerry
>
>
> "Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
> news:st5Fc.11168$wY5.9000@attbi_s54...
> > This impedance meter is based on SM6MOM's winning entry in the RF
Design
> > Magazine contest in 1986. As I pointed out to the then

> > editor of the magazine, the exact same impedance meter was described
> > in the Proceedings of the IRE in 1947. You might want to read the
> > article by the original inventor (I believe his name was Samuels and the
> > title is something like "A Oscillographic Method of Impedance
> Measurement".)
> >
> > Rick N6RK
> >
> > "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> > news:tY1Fc.22294$x9.21777@nwrddc02.gnilink.net...
> > > In a recent thread on VHF impedance measurement, it was indicated
that
> > > VK2ZAB had instructions for building an impedance meter. I have
> acquired
> > > all the parts needed for constructing a meter described in ZABs
article.
> > > But, I am confused about how to operate it when/if the meter gets
> > finished.
> > > I'd sure like to corespond with someone who has built and/or used one
of
> > > these meters.
> > >
> > > Jerry
> > >
> > >
> >
> >
>
>

51. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 15:58:14 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40e58616$0$4719$39cecf19@news.twtelecom.net>
Source record: 92622

GOAT

cva wrote:
> Shove you commie leftest crap high up your ass. Bush is a digusting
> dictator and should be put on trial for war crimes. Who should be on
> trial for war crimes Bush or Saddam? Bush of course.
> We need to take back this country from this incompetent jackass....
> get universal health care for all Americans, kick out every God Damn
> illegal alien, rip up all of those unfair trade agreements and make new
> ones that favor Americans. Then Bush should apologize to the French..
> because THEY were right about the WMDs. Bush has made America
> the joke of the world. "We have a wor on terrr... the enemy is at oor
> dorstep.
> we must defeat this enemy.. they don't want freedom"" FUCK YOU BUSH
> you stupid ignorant texas pile of crap.
> Health care for EVERY AMERICAN. 260 billion american $ diverted from
> americans to Iraq. CRIME OF THE CENTURY!!!

52. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 16:27:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n13be0li0a1glnsse3osncbvts9f6nk54q@4ax.com>
Source record: 92623

On Fri, 2 Jul 2004 14:48:34 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Thank you for what? ;o)
>
>Anyway, what else do you expect from an Italian clown ?
Chuckles, however, unless I'm mistaken, you happen to be British,
n'est pas? Or have you regenerated through too much of the vine?

53. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 16:29:26 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc42h6ffh1@hercules.btinternet.com>
Source record: 92624

>
> Is there any project, any commercial antenna
> of such length, that allow me to work all band
> 7 - 14 - 21 - 28 MHz ?

==========

All dipoles of any reasonable length, inverted-V or not, commercial or home brew, are quite efficient on all HF bands in that they all radiate most of the power which is put into them. The problems lie in loss in the transmission line and the essential tuner.

Erect the highest and longest dipole you can, feed it with open-wire line, use a tuner appropriate for each band of interest and you won't be disappointed.

Or better still, if you can manage it, erect the longest inverted-L you can and feed it at one end tuned against a modest ground system such as a dozen bent surface or shallow-buried radials.

Reg, G4FGQ

54. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 16:39:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a93be09nj0ropsl7je199rph1303sme7q4@4ax.com>
Source record: 92625

On Fri, 2 Jul 2004 15:21:22 +0000 (UTC), Harry Whitfield
<g6auc@invalid.net> wrote:

>Well, I didn't actually forget - I thought you would know the impedance
>of the type F phones. (-:
>
>They appear to be two 2000 ohm earpieces in series, so the impedance is
>presumably 4000 ohm.
>
>The DC resistance is 3860 ohm.
>
>I was on the limits of my generator's 50dB attenuation and on the
>limits of my voltmeter, so the threshold values are likely to be very
>approximate.
>
>We are in the region of 250 pW !

Which is spot on to
>> a quiet whisper = 6 femtoWatts per cMï¿½
>>
>> conversation at 1M = 1 nanoWatt per cMï¿½

Hi Harry,

You will have to forgive our Brit, computation is a trial, nailing
down specifics difficult, and hearing is not what it used to be.
None of this is terribly difficult, so I am sure Reggie anticipated
your answer, but simply out of Trollish behavior, he prefers to play
naif (a bit beyond the pale at his age however). This is all, of
course, to escape attribution for his intellectual sources for his
upcoming software :-P

You are welcome Punchinello, even if do you rustle this next release's
code under your apron to hide your plagiarism from view.

73's
Richard Clark, KB7QHC

55. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 16:45:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc43eo$pv7$1@titan.btinternet.com>
Source record: 92626

> What if I said 43?

==========

If you had also mentioned the measurement units, such as femto-Watts, that would have been the ideal, even perfect, reply to my enquiry and would have deserved the congratulations of all and sundry.

Punchinello, G4FGQ

56. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 17:08:52 UTC
From: "R. Scott" <n7hjTHREAD@yahoo.com>
Message-ID: <40E596A4.2EB78A88@yahoo.com>
Source record: 92627

Gawd I hate it when Jr High lets out and mommy and daddy dont look
to see what the brat is up to on the computer

--
Rick
Everett, Washington
Remove THREAD to reply.

57. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 17:59:34 UTC
From: richardharrison@webtv.net
Message-ID: <22772-40E5A286-341@storefull-3255.bay.webtv.net>
Source record: 92628

Reg, G4FGQ wrote:
"I would like to know, crudely, the audio input level to 2000-ohm, non diaphragm head phones for a nice, comfortable, not too difficult intensity level."

First problem is sensitivity of the phones. These vary widely.

Satisfactory reception also depends on competing noise in addition to signal strength. According to the FCC in the U.S.A., you may need 1/2 millivolt for satisfactory reception.

A kilowatt radiated by a medium wave transmitter may produce about 200 millivolts/m at one mile. It depends on antenna and path. Field strength is proportional to the square root of the watts per square meter times 377.

I used to live about 15 mile4s from a 50 KW station. The signal strength at a mile from the station could have been 1.5 volts/ m, and at 15 miles could have been 0.1 V/m. Point is, my crystal set drove a dynamic loudspeaker directly through the output transformer mounted on the speaker. It was clearly audible. Impedance presented to the crystal set was closer to 10,000 ohms at 1 KHz than to 2000 ohms. The speaker and its cabinet were from a battery vacuum-tube set. The audio power may have been less than a microwatt, but as a kid my ears were acute.

My 2nd edition GE "Transistor Manual" has 2000-ohm headphone amplifiers with 2 milliwatts maximum power output.

Chinese stereo headphones claim 20-20KHz response, 32-ohms impedance, 100dB/1mW sensitivity, 140 mW rated input, 400 mW max. etc. Much of this spec. is target and untrue. Wide variations exist between samples of these phones claiming similar specs.

The GE book is believable. Class A power output is from the familiar. First formula says maximum power is 1/2 the product of the peak voltage and peak current. Load resistance is then the peak voltage divided by the peak current. So, Load resistance=Epk squared/2Po

When GE prints the circuit of a 2 milliwatt amplifier driving 2000-ohm phones, I believe it works.

Best regards, Richard Harrison, KB5WZI

58. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 18:23:36 UTC
From: /* frank */ <__frank__@despammed.com>
Message-ID: <2kln99F3u0h6U1@uni-berlin.de>
Source record: 92629

Bob Miller ha scritto:

> with the use of 450 ohm feedline and a manual tuner.

Where I can purchase this kind of line ?
(some online mall that delivery outside USA/Canada),
because I can't find it here in Italy.

Thanks again
Best 73

59. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 18:59:09 UTC
From: "Dee D. Flint" <deeflint01@comcast.net>
Message-ID: <QvydnZYd85XPLHjdRVn-hQ@comcast.com>
Source record: 92630

"Dave" <noone@nowhere.com> wrote in message
news:45WdnYY4A9EV83jdRVn-gQ@crocker.com...
> don't worry about it... cut it any length you can and use a tuner... it
will
> work all bands from 160m to 6m and probably higher. don't count inches,
GET
> ON THE AIR and have fun!
>

I agree that he should just get on the air. But those inaccurate conversions although only inches result in feet in antenna dimensions and is not insignificant. If one wants to get into resonant antennas, it becomes particularly important. Even at 10 meters, the difference is 2.5 feet for a full wave length antenna between using a conversion of 3 feet per meter versus 3.25 feet (3 feet 3 inches) per meter. For a half wave dipole it would be 1.25 feet. At 160 meters the difference climbs to 40 feet for a full wave loop and 20 feet for a dipole.

These differences can be important even with a tuner. We've got an 80 meter loop cut for the voice segment. My internal tuner will NOT tune it for the CW portion so I must use my external tuner. If we had based the length on using 3ft/meter rather than the 3.25ft/meter, it would have been too short to tune on even the voice portion of the band.

Dee D. Flint, N8UZE

> "Dee D. Flint" <deeflint01@comcast.net> wrote in message
> news:No6dnfdTCbxmwXjdRVn-tw@comcast.com...
> >
> > "Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
> > news:fqlae0pp07e5igojh1tgdq05rkp5ioctmq@4ax.com...
> > > On Fri, 02 Jul 2004 07:42:24 +0200, /* frank */
> > > <__frank__@despammed.com> wrote:
> > >
> > > >I can install only a dipole of about 10 meters
> > > >(as inverted V).
> > > >
> > > >Is there any project, any commercial antenna
> > > >of such length, that allow me to work all band
> > > >7 - 14 - 21 - 28 MHz ?
> > > >
> > > >Thanks
> > >
> > > If you can make it 11 meters long, about 33 feet, that should get you
> > > 14 thru 28 mhz, with the use of 450 ohm feedline and a manual tuner.

> > > If you can stretch it to 51 feet, you can add 10 and 7 mhz.
> > >
> > > bob
> > > k5qwg
> > >
> > >
> >
> > 10 meters = 32.8 feet
> > 11 meters = 36.1 feet
> >
> > A meter is approximately 3 feet and 3 inches NOT just 3 feet. Those
> inches
> > add up after a while.
> >
> > Dee D. Flint, N8UZE
> >
>
>

60. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 20:26:41 UTC
From: Harry Whitfield <g6auc@invalid.net>
Message-ID: <020720042126394606%g6auc@invalid.net>
Source record: 92631

In article <cc1pg6$5c4$1@hercules.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote:

> I am writing a program involving an antenna plus two coupled tuned circuits
> plus a matched simple receiver.
>
> I would like to know, crudely, the audio power input level to 2000-ohm, iron
> diaphragm headphones for a nice, comfortable, not too difficult listening
> level. Such as when the phones are used on a crystal and cat's whisker
> radio receiver.
>
> Such headphones are more sensitive than modern 8-ohm varieties. I have a
> pair of 2000-ohm headphones but unfortunately no means of measuring power or
> voltage input.
>
> Just the number of micro-watts please. At what low power input level does
> speech or music just BEGIN to fade out to a person of normal hearing? Any
> ideas? I could take the average of a few replies.
> ----
> Reg, G4FGQ

Reg,

I (also) have a very old pair of Philips Hi-Fi headphones.

The spec is given as 2 x 600 ohm (they are stereo phones).

Sensitivity is given as 112dB at 1mW.

I assume this means 112dB above the Threshold of Hearing (1pW per
square metre) at 1mW in.

A power input of 1nW would given a sound level of 52dB, which would be
at a normal (comfortable) level.

A power input of 1pW would give a sound level of 22dB, which would be
at whisper level.

These headphones would appear to be more sensitive than the S G Brown
type F headphones.

Harry.

61. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 20:40:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0cgbe09kv75a0n9lhce3fnajojv2455j47@4ax.com>
Source record: 92632

On Fri, 2 Jul 2004 16:45:12 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> What if I said 43?
>
>==========================
>
>If you had also mentioned the measurement units, such as femto-Watts, that
>would have been the ideal, even perfect, reply to my enquiry and would have
>deserved the congratulations of all and sundry.
>----
>Punchinello, G4FGQ
>

Ah Shirley!

You jest. Thanks uttered by Punchinello? Time and tide wait for no
such unlikely occasion. Lord Kelvinator wouldn't be very proud of
you, old son, if I had to lead you by the hand through ALL of the
work, much less spoon fed you the answer. It is only a matter of
simple junior high math employing conversions (all the numbers are
already there). About as demanding as chinese checker strategy.

88's
Richard Clark, KB7QHC

62. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 20:46:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc4hk2$i7m$1@sparta.btinternet.com>
Source record: 92633

> > with the use of 450 ohm feedline and a manual tuner.
>
> Where I can purchase this kind of line ?
> (some online mall that delivery outside USA/Canada),
> because I can't find it here in Italy.
>
==========

Frank, the exact impedance of the high impedance line doesn't matter at all. You don't even need to know what its impedance is. Line loss is small just because it has a high impedance.

Any line where the pair of wires are spaced apart more than 25mm will be satisfactory. Wire spacing can change along its length without any bad effects. The only effect will be a change in tuner component settings.

If you are unable to purchase a line then it is not difficult to make. You can make the stuff in less time than it takes to order and deliver from a manufacturer.

Use 1.6 or 1.3 mm diameter wire. Space the wires 50 mm to 100 mm apart. There are many ways of fixing the wire to the ends of rigid plastic spacers. The distance between spacers along the line can be anything from 100 to 200 mm. Construction depends on your judgement of what weather conditions, wind velocity, etc., the line will have to withstand and the time in months. Failure due to flexing in the wind can be a problem.

Reg, G4FGQ

63. Re: QUESTION & REQ: Real Audio Radio Recorder with Schedule/Timer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 20:48:45 UTC
From: StrikitRich <strikitrich@nospam.excite.com>
Message-ID: <strikitrich-A0F999.16484502072004@comcast.dca.giganews.com>
Source record: 92634

In article <Xns951A46AAA5AB0kinsey6@65.32.1.7>,
Kinsey 6 <kinsey6@somewhere.outthere.com> wrote:

> Alright. I don't know what I'm looking for at all, so I figured I would ask
> all of you. There is this streaming real audio radio show I want to record.
> It is on weekdays from noon until 3pm, but I have no idea what program I
> should get to record it on a schedule.
>
> Any guidance would be great. Thanks.
>
>
>
> Kinsey6

What kind of computer do you have, PC or Mac?

64. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 20:48:50 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <5tOdnYe3tPqzV3jdRVn-iQ@comcast.com>
Source record: 92635

"/* frank */" <__frank__@despammed.com> wrote in message
news:2kkam0F36l0lU1@uni-berlin.de...
> I can install only a dipole of about 10 meters
> (as inverted V).
>
> Is there any project, any commercial antenna
> of such length, that allow me to work all band
> 7 - 14 - 21 - 28 MHz ?
>
> Thanks

Frank,
Any antenna you put up is not forever. So, start small. At this pont in the sunspot cycle there is not much propagation on 10 & 15 m. A wire 10 m long is resonant at very close to 14.2 MHz. Feed it in the center with 50 Ohm coax, and get on 20 meters. As an inverted V, you should be able to trim the SWR to well below 1.5:1.

Tam/WB2TT

65. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 22:09:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cc4me9jq1@hercules.btinternet.com>
Source record: 92637

Dear Rich, in your own best interests you should merely have said "I don't know.".

Or better still - - - silence.

Punch, G4FGQ

66. Extended Double Zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-02 22:32:03 UTC
From: Larry D <slewrate@hotmail.com>
Message-ID: <mIednXW6jez5f3jdRVn-jA@bright.net>
Source record: 92638

Hi guys.

I decided to try the Extended Double Zepp, thanks to some advice I got from the contesting.com archives. I put up two of them, one for 18 MHz (70' long, 60 high) and one for 21 MHz (60' long, 50' high.)

One of the items mentioned was that "the tuned feeder is not necessary, if you just run balanced line all the way to a tuner."

This is how I have always run my wire antennas anyway, I am very big on ladderline, and it has always served me well in the past. However, what I am finding is that I have a pair of very nice antennas; they outperform anything else I have on 20m and above, except that there is no directionality whatsoever!

Could this be from the way I am feeding them? Any advice appreciated.

Larry DiGioia N8KU

67. 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 00:39:05 UTC
From: spidrw@gnt.net
Message-ID: <d8c667d9.0407021639.35623f37@posting.google.com>
Source record: 92639

I've got a 2 meter antenna for my mobile unit, and I'm wondering if it could double as a GPS antenna. I've got a friend, who 5 years ago showed me how he had his laptop running MS Streets & Trips hooked to a GPS receiver. I'm not sure if he had a standalone receiver meant for laptop use, or somehow used his ham antenna and another receiver. Any ideas?

Thanks,
Andrew Weber
KG4OTT

68. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 00:40:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7mvbe0l859ir6pu84421levst67vc6hlsv@4ax.com>
Source record: 92640

On Fri, 2 Jul 2004 22:09:13 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Dear Rich, in your own best interests you should merely have said "I don't
>know.".

Oh the ravage of age upon you - here it is again
On Thu, 01 Jul 2004 20:43:37 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:
> I don't know

>
>Or better still - - - silence.
>----
>Punch, G4FGQ
>
My own best interests? Somehow I don't see you in the confessional
offering Ave Marias to me (now there is an image, Punchinello with a
Mitre - the pope and you both like funny hats).

I'm still not going to spoon feed you, you know. Do you have a number
yet? Or is this the better, silence? ;-0

73's
Richard Clark, KB7QHC

69. 50 ft Rohn 25G Tower FS

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 00:59:54 UTC
From: Jack <w1wef@intergate.com>
Message-ID: <10ebj8gpot7u655@corp.supernews.com>
Source record: 92636

Very Clean, includes new concrete base plate, rotor shelf, top section which accepts up to 2 in mast. $295. On ground in Ct.
w1wef@arrl.net

70. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 01:04:57 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <oa0ce05iju7gki2gmpk5gumks8jo6p9u5o@4ax.com>
Source record: 92641

On 2 Jul 2004 17:39:05 -0700, spidrw@gnt.net (Andrew) wrote:

>I've got a 2 meter antenna for my mobile unit, and I'm wondering if it
>could double as a GPS antenna. I've got a friend, who 5 years ago
>showed me how he had his laptop running MS Streets & Trips hooked to a
>GPS receiver. I'm not sure if he had a standalone receiver meant for
>laptop use, or somehow used his ham antenna and another receiver. Any
>ideas?
>
The 2 meter band is about 146 megaHertz. GPS uses a frequency of
around 1.2 gigaHertz.

Not many antenna designs can handle a 10:1 frequency range, especially
with such high frequencies.

There are external antennas available for some GPS units, but most
have a built in antenna,

There is a type of GPS receiver, sometimes called a "mouse" type,
which has no display or processor iteself, but must be attached to a
laptop or PDA in order to work.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

71. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 01:09:28 UTC
From: j999w@aol.com
Message-ID: <20040702210928.25561.00001110@mb-m29.aol.com>
Source record: 92642

Here's a great chance to be on the cutting edge ... try it and tell us how it worked out!

Marconi pushed the envelope ... your turn!

(it wont hurt your GPS)

jw
K9RZZ

72. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 01:16:05 UTC
From: dplatt@radagast.org
Message-ID: <10ec26ljh5aiu72@corp.supernews.com>
Source record: 92643

In article <d8c667d9.0407021639.35623f37@posting.google.com>,
Andrew <spidrw@gnt.net> wrote:

>I've got a 2 meter antenna for my mobile unit, and I'm wondering if it
>could double as a GPS antenna.

Possibly, but I doubt that it would be a good one. GPS uses
frequencies roughly 10x as high as a 2-meter rig. The 2-meter antenna
would probably not be resonant on GPS frequencies, and if it is of a
helical design or has a base-loading coil it might very well be a
lousy antenna on the GPS frequency (the coil or helical winding
could act as a low-pass filter, blocking the GPS signal).

Its radiation pattern would probably have a lot of lobes pointed in
weird directions, and I suspect that the GPS signal from any given
satellite would be subject to a great deal of fading and jitter as the
vehicle and antenna move.

GPS receivers tend to use small "patch" antennas, etched into a piece
of PC-board substrate. These most often have a fairly uniform,
low-gain sensitivity pattern in the skyward direction.

Also, the GPS antennas separate from the GPS receiver are usually
"active" ones - they have a preamplifier very close to the antenna,
and boost the signal before it's fed down the coax to the receiver.
Losses in a typical RG-8X or RG-59 thin coax are quite high at 1.5
gigs, and the already-weak GPS signal could tend to be lost if not
preamplified.

The other problem with using a 2-meter antenna as a GPS antenna would
be that you'd need some pretty good form of switching, to keep the
input of your GPS receiver from being blown out when you keyed up the
2-meter transmitter.

> I've got a friend, who 5 years ago
>showed me how he had his laptop running MS Streets & Trips hooked to a
>GPS receiver. I'm not sure if he had a standalone receiver meant for
>laptop use, or somehow used his ham antenna and another receiver. Any
>ideas?

I'd guess that it was a standalone receiver. Even back then, there
were GPS receiver the size of a pack of playing cards (or smaller),
which plug into a PC's serial or USB port.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior

I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

73. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 01:52:41 UTC
From: NN7K - Jim <nn7kexk7zfgnospam@sbcglobal.net>
Message-ID: <JjoFc.7807$FF4.4868@newssvr27.news.prodigy.com>
Source record: 92644

Not only is the frequency range vastly different, (tho, the SWR LOSS's would mean quite little extra loss from coax , in receive mode for the GPS) BUT- the GPS uses a psudo omni directional antenna , read that an immitation of an isotropic , relative to ALL angles, and polarizations)! (remember that , with a verticle, a direct overhead signal will be next to invisible)! and it take something like 4 satellites, to calculate where you are (these are moveing FAST! Altho, think there is a ham antenna was designed for such purpose- but SPENDY! Jim NN7K

Dave Platt wrote:
> In article <d8c667d9.0407021639.35623f37@posting.google.com>,
> Andrew <spidrw@gnt.net> wrote:
>
>
>>I've got a 2 meter antenna for my mobile unit, and I'm wondering if it
>>could double as a GPS antenna.
>
>
> Possibly, but I doubt that it would be a good one. GPS uses
> frequencies roughly 10x as high as a 2-meter rig. The 2-meter antenna
> would probably not be resonant on GPS frequencies, and if it is of a
> helical design or has a base-loading coil it might very well be a
> _lousy_ antenna on the GPS frequency (the coil or helical winding
> could act as a low-pass filter, blocking the GPS signal).
>
> Its radiation pattern would probably have a lot of lobes pointed in
> weird directions, and I suspect that the GPS signal from any given
> satellite would be subject to a great deal of fading and jitter as the
> vehicle and antenna move.
>
> GPS receivers tend to use small "patch" antennas, etched into a piece
> of PC-board substrate. These most often have a fairly uniform,
> low-gain sensitivity pattern in the skyward direction.
>
> Also, the GPS antennas separate from the GPS receiver are usually
> "active" ones - they have a preamplifier very close to the antenna,
> and boost the signal before it's fed down the coax to the receiver.
> Losses in a typical RG-8X or RG-59 thin coax are quite high at 1.5
> gigs, and the already-weak GPS signal could tend to be lost if not
> preamplified.
>
> The other problem with using a 2-meter antenna as a GPS antenna would
> be that you'd need some pretty good form of switching, to keep the
> input of your GPS receiver from being blown out when you keyed up the

> 2-meter transmitter.
>
>
>> I've got a friend, who 5 years ago
>>showed me how he had his laptop running MS Streets & Trips hooked to a
>>GPS receiver. I'm not sure if he had a standalone receiver meant for
>>laptop use, or somehow used his ham antenna and another receiver. Any
>>ideas?
>
>
> I'd guess that it was a standalone receiver. Even back then, there
> were GPS receiver the size of a pack of playing cards (or smaller),
> which plug into a PC's serial or USB port.
>

74. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 02:15:39 UTC
From: richardharrison@webtv.net
Message-ID: <1073-40E616CB-164@storefull-3254.bay.webtv.net>
Source record: 92645

Harry Whitfield wrote:
"Sensitivity is given as 112 dB at 1 mW. I assume this means 112 dB above the Threshold of Hearing (1pW per square metre) at 1 mW in."

That looks OK to me. My handy "Science Answer Book says:
Hearing starts at zero decibels. 10 units is a tenfold increase. The sound made by leaves rustling is often 10 decibels. Office noise level is typically 50 decibels. A pneumatic drill = 80 dB. A riveting machine = 110 dB. A jet takeoff at 61 m (200 ft.) measures 120 dB. Noise above 70 decibels harms hearing. At 140 dB, noise is physically painful.

Acute hearing is sensitive. More so in some other species.

In a previous posting I may have appeared naive saying I believed GE produced a circuit for a 2 milliwatt 2000-ohm headphone amplifier. But I have additional evidence of the adequacy of 2 milliwatts. For many years I worked at a radio station where we kept a pair of crystal phones near the audio patch panel. These, because of their extremely high impedance, could be bridged across any program line with no significant effect. Program lines are usually adjusted to a zero VU level (1 milliwatt into 600 ohms) or 0.775 volt on program peaks. Magnetic phones produced about the same audio output with 0.775 volts as did the crystal cans. The difference is only in the circuit loading of the 2000-ohm magnetic phones on a 600-ohm circuit. Point is, one milliwatt is plenty loud in headphones. I know from listening.

Best regards, Richard Harrison, KB5WZI

75. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 02:35:19 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <4j6ce0pdd0a7i39ndu1nn1kbj2gmmfdb82@4ax.com>
Source record: 92646

On Fri, 2 Jul 2004 08:59:17 -0400, "Dee D. Flint"
<deeflint01@comcast.net> wrote:

>
>"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
>news:fqlae0pp07e5igojh1tgdq05rkp5ioctmq@4ax.com...
>> On Fri, 02 Jul 2004 07:42:24 +0200, /* frank */
>> <__frank__@despammed.com> wrote:
>>
>> >I can install only a dipole of about 10 meters
>> >(as inverted V).
>> >
>> >Is there any project, any commercial antenna
>> >of such length, that allow me to work all band
>> >7 - 14 - 21 - 28 MHz ?
>> >
>> >Thanks
>>
>> If you can make it 11 meters long, about 33 feet, that should get you
>> 14 thru 28 mhz, with the use of 450 ohm feedline and a manual tuner.
>> If you can stretch it to 51 feet, you can add 10 and 7 mhz.
>>
>> bob
>> k5qwg
>>
>>
>
>10 meters = 32.8 feet
>11 meters = 36.1 feet
>
>A meter is approximately 3 feet and 3 inches NOT just 3 feet. Those inches
>add up after a while.
>
>Dee D. Flint, N8UZE

Yes, this is how I bombed in basic Trigonometry and decided to not
become an an Electrical Engineer :-)

Bob
k5qwg

76. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 02:36:31 UTC
From: artie <artie.m@gmail.com>
Message-ID: <020720041936300364%artie.m@gmail.com>
Source record: 92647

In article <d8c667d9.0407021639.35623f37@posting.google.com>, Andrew
<spidrw@gnt.net> wrote:

> I've got a 2 meter antenna for my mobile unit, and I'm wondering if it
> could double as a GPS antenna. I've got a friend, who 5 years ago
> showed me how he had his laptop running MS Streets & Trips hooked to a
> GPS receiver. I'm not sure if he had a standalone receiver meant for
> laptop use, or somehow used his ham antenna and another receiver. Any
> ideas?
>
> Thanks,
> Andrew Weber
> KG4OTT

The L1 GPS frequency used by us common folks is 1575.42 MHz, a little
more than 10x 2 meters. Another minor problem is that GPS antennas (and
signals) are circularly polarized (easy to do with a patch or with
helical designs). If at the end of a cable, most GPS antennas (such as
patches) have built-in amplifiers (and filters), and expect +5 VDC
(current limited) supplied on the cable to run the amp.

You could try to use your 2m antenna at GPS frequencies by putting a
high-pass filter between it and the GPS receiver; I don't think it's
going to work very well. Already mentioned is the fact that vertical
antennas have a sharp null directly overhead. Circular polarization is
another issue. Gain (loss) at L1 is going to hurt.

But give it a try and let us know how it works!

77. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 02:52:38 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40e61f76$0$82995$39cecf19@news.twtelecom.net>
Source record: 92648

No. At best, the 2 meter element will be an endfire longwire at GPS frequencies.

I don't know the reason you wish to run both on the same antenna, but I also needed the same antennas on my car. I have a Garmin III Plus as the input to APRS in the car. I use a suction cup mounted external antenna for the Garmin GPS which is about (from memory) 2.5 inches wide, 1.5 inches deep, and .4 inches thick. It works very well mounted to the lower center of the windshield on my Jetta. I run through a duplexer into a trunk mounted Comet UHV for the 2m APRS antenna.

tom
K0TAR

Andrew wrote:

> I've got a 2 meter antenna for my mobile unit, and I'm wondering if it
> could double as a GPS antenna. I've got a friend, who 5 years ago
> showed me how he had his laptop running MS Streets & Trips hooked to a
> GPS receiver. I'm not sure if he had a standalone receiver meant for
> laptop use, or somehow used his ham antenna and another receiver. Any
> ideas?
>
> Thanks,
> Andrew Weber
> KG4OTT

78. BPL goes dark in Cedar Rapids Iowa

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 02:58:22 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2004.07.03.02.59.47.850896@spam.spam>
Source record: 92649

Nice!
http://www.remote.arrl.org/news/stories/2004/06/28/2/?nc=1

One thing to note...
They tried notching out amat bands (without success)
but were going to leave all the other HF bands trashed.

79. Re: Extended Double Zepp

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 03:38:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e62b36_7@corp.newsgroups.com>
Source record: 92650

Larry D wrote:
> Hi guys.
>
> I decided to try the Extended Double Zepp, thanks to some advice I got from
> the contesting.com archives. I put up two of them, one for 18 MHz (70' long,
> 60 high) and one for 21 MHz (60' long, 50' high.)
>
> One of the items mentioned was that "the tuned feeder is not necessary, if
> you just run balanced line all the way to a tuner."
>
> This is how I have always run my wire antennas anyway, I am very big on
> ladderline, and it has always served me well in the past. However, what I am
> finding is that I have a pair of very nice antennas; they outperform
> anything else I have on 20m and above, except that there is no
> directionality whatsoever!
>
> Could this be from the way I am feeding them? Any advice appreciated.

You may be getting interaction between the two antennas. And you
wouldn't be trying to share the same feedline, would you?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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80. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 03:45:58 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <GNqdnVo3h9tvtnvdRVn-sw@comcast.com>
Source record: 92651

```
"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:4j6ce0pdd0a7i39ndu1nn1kbj2gmmfdb82@4ax.com...
> On Fri, 2 Jul 2004 08:59:17 -0400, "Dee D. Flint"
> <deeflint01@comcast.net> wrote:
>
> >
> >"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
> >news:fqlae0pp07e5igojh1tgdq05rkp5ioctmq@4ax.com...
> >> On Fri, 02 Jul 2004 07:42:24 +0200, /* frank */
> >> <__frank__@despammed.com> wrote:
> >>
> >> >I can install only a dipole of about 10 meters
> >> >(as inverted V).
> >> >
> >> >Is there any project, any commercial antenna
> >> >of such length, that allow me to work all band
> >> >7 - 14 - 21 - 28 MHz ?
> >> >
> >> >Thanks
> >>
> >> If you can make it 11 meters long, about 33 feet, that should get you
> >> 14 thru 28 mhz, with the use of 450 ohm feedline and a manual tuner.
> >> If you can stretch it to 51 feet, you can add 10 and 7 mhz.
> >>
> >> bob
> >> k5qwg
> >>
> >>
> >
> >10 meters = 32.8 feet
> >11 meters = 36.1 feet
> >
> >A meter is approximately 3 feet and 3 inches NOT just 3 feet. Those
inches
> >add up after a while.
> >
> >Dee D. Flint, N8UZE
>
> Yes, this is how I bombed in basic Trigonometry and decided to not
> become an an Electrical Engineer :-)
>
> Bob
> k5qwg
>
```

>
I tend to remember that a meter is 39.37 inches. Makes for an extra step,
but fewer numbers to remember.

Tam/WB2TT

81. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 03:49:34 UTC
From: richardharrison@webtv.net
Message-ID: <21294-40E62CCE-154@storefull-3257.bay.webtv.net>
Source record: 92652

John, MW1FGQ wrote:
"I used to carry a pair of old military headphonees in my kit when building broadcast installations until they were nicked by some ****."

Several models of telephone receivers were used in WW-2, including the TS-10 (sound powered) unit. This was probably the most efficient transducer except for the R-13 and other resonant models designed for morse code reception. The HS-33 with its leather-covered headband is the model I saw most often. I don`t remember it being particularly sensitive but it did have pretty good fidelity.

I seem to recall seeing the most valuable patent ever issued by the U. S. Patent Office. It`s the Alexander G. Bell telephone patent. The microphone was dynamic, not carbon, so his receiver had to be sensitive as the instrument was sound powered.

I used to carry around a surplus TS-10 unit in my kit. Although sound powered, it is not sharply resonant. The fidelity is not too bad. Aboard my ship in WW-2, I had a spare TS-10 unit wired with an attenuator and connected to the ship`s entertainment and information line. There was an almost 24-hour music feed from radio or records. We had a V-disk transcription library too. Nobody complained and the zero dBm level was plenty loud if I turned up the attenuator. Little electrical power is needed for considerable acoustical power when using the right transducer. As long as I kept the movie projector running, the skipper would let me get away with about anything.

Best Regards, Richard Harrison, KB5WZI

82. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 11:04:53 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <j84de0hamoh4fv4ffb3qt0ntoj5pn8sf01@4ax.com>
Source record: 92653

On Fri, 02 Jul 2004 08:25:19 -0700, cva <bn@art.com> wrote:

>Russ wrote:
>
>>On Thu, 01 Jul 2004 09:28:36 -0700, cva <bn@art.com> wrote:
>>
>>
>>
>>>Bill Turner wrote:
>>>
>>>
>>>
>>>>That would be "makes" etc, etc, look stupid.
>>>>
>>>>Got a mirror?
>>>>
>>>>
>>>>
>>>>
>>>>
>>>go ahead and look in the mirror you stupid bush supporter.
>>>we have a war on terrr. the enemy is at our doorstep. we must
>>>defeat that enemy. fuck you bush you digusting coward. send
>>>your daughters to iraq.
>>>
>>>too bad a simple boy like you has to resort to spelling correction
>>>cause ya have no brains to formulait a argumment. keep that spellin
>>>correctin program handy. keep on suckin bush cock.
>>>
>>>
>>
>>As I have said over and over again, the commies are haters, pure and
>>simple. Nothing comes out of them but venom, spite and treason. They
>>have no better ideas nor even good ones. Go ahead, make some real,
>>cogent, thought-out solutions for some real-world problems like
>>keeping terrorism away from our children. You won't however; you will
>>only answer with more leftist poison.
>>
>>Russ
>>
>>
>Shove you commie leftest crap high up your ass. Bush is a digusting
>dictator and should be put on trial for war crimes. Who should be on
>trial for war crimes Bush or Saddam? Bush of course.

>We need to take back this country from this incompetent jackass....
>get universal health care for all Americans, kick out every God Damn
>illegal alien, rip up all of those unfair trade agreements and make new
>ones that favor Americans. Then Bush should apologize to the French..
>because THEY were right about the WMDs. Bush has made America
>the joke of the world. "We have a wor on terrr... the enemy is at oor
>dorstep.
>we must defeat this enemy.. they don't want freedom"" FUCK YOU BUSH
>you stupid ignorant texas pile of crap.
>Health care for EVERY AMERICAN. 260 billion american $ diverted from
>americans to Iraq. CRIME OF THE CENTURY!!!

I guess I'm right. Nothing but bile, venom and hate. You can't think, probably as a result of the leftist indoctrination you received in the public schools instead of an education. I'll answer just one of your "points". Where does it say that I (or you) should be provided health care at government expense? I and my whole extended family have been providing our own health care for decades now, with the help of our employers. We trade our skills and knowledge for money and benefits. Work is great thing. You should consider getting some. Better yet, you should start a business. That will get your head on straight faster than anything.

Russ

83. butternut and 17 meters problem

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 12:08:45 UTC
From: John WA3YMM <jmarkinack@verzion.net>
Message-ID: <hlxFc.6276$zn2.2563@nwrdny03.gnilink.net>
Source record: 92654

Greeting!

I am having problem tuning my new Butternut HF9V vertical on 17 meters.. My antenna is ground mounted 60 feet from the house or anything else. I have 40 radials surface mounted just under the grass... The swr on all the other bands is about 1.4 to 1 or less, but on 17 meters its 2.4 to 1 causing my ft-847 to fold back power.. Though! the high swr, I am still able to make contacts to Europe and other DX on the band with little effort with less than a 100 watts... I do have a MJF-259 analyzer and still have problems.. I have spent hours at attempting to get a lower swr

Any Help would be appreciated

Thx in advance ` 73

WA3YMM

84. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 13:12:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e6b1b4$1_7@corp.newsgroups.com>
Source record: 92655

Russ wrote:
> Where does it say that I (or you) should be
> provided health care at government expense? I and my whole extended
> family have been providing our own health care for decades now, with
> the help of our employers. We trade our skills and knowledge for
> money and benefits.

I want the government to give me some Hawaiian beach front property
as part of my socialized welfare package.

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85. Re: butternut and 17 meters problem

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 13:16:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e6b287$1_7@corp.newsgroups.com>
Source record: 92656

John WA3YMM wrote:

> Greeting!
>
> I am having problem tuning my new Butternut HF9V vertical on 17 meters.. My
> antenna is ground mounted 60 feet from the house or anything else. I have 40
> radials surface mounted just under the grass... The swr on all the other
> bands is about 1.4 to 1 or less, but on 17 meters its 2.4 to 1 causing my
> ft-847 to fold back power.. Though! the high swr, I am still able to make
> contacts to Europe and other DX on the band with little effort with less
> than a 100 watts... I do have a MJF-259 analyzer and still have problems.. I
> have spent hours at attempting to get a lower swr
>
> Any Help would be appreciated

Easy solution - use a matching network (tuner) on 17m. What does the
MFJ-259 say the 17m impedance is looking into the feedline. How long
and what kind of feedline?
--
73, Cecil http://www.qsl.net/w5dxp

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86. Re: BPL goes dark in Cedar Rapids Iowa

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 14:07:35 UTC
From: fractenna@aol.com
Message-ID: <20040703100735.11491.00000670@mb-m23.aol.com>
Source record: 92657

With the completion of this trial, I am of the opinion that there is a unique opportunity for amateur radio to cooperate with the power companies and build a bridge to solve and/or resolve the RF mitigation challenges.

I am also of the opinion that it would be a profound mistake to take a standard alpha or beta test--successfully completed earlier than expected-- and interpret it as some 'victory' to 'kill BPL'. This is far from it; and if some vocal, minority of hams take that approach, it will only render their voice as irrelevant in the ongoing process. It will, again in my opinion, look very bad for ham radio.

Time to build bridges into the future. Surely you agree.

73,
Chip N1IR

87. 300 Ohm Twin Lead Antenna Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 15:22:54 UTC
From: /* frank */ <__frank__@despammed.com>
Message-ID: <2ko12bF4ie3kU1@uni-berlin.de>
Source record: 92658

Is this feed, suitable for ham purposes (transmission power: max 100W) ?

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&category=4672&item=5706363235

Tnx in advance

88. Re: 300 Ohm Twin Lead Antenna Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 15:26:17 UTC
From: /* frank */ <__frank__@despammed.com>
Message-ID: <2ko18mF4eb0eU1@uni-berlin.de>
Source record: 92659

Which one do you suggest?

http://thewireman.com/antennap.html#balanced

89. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 15:39:39 UTC
From: NN7K - Jim <nn7kexk7zfgnospam@sbcglobal.net>
Message-ID: <%qAFc.86257$ZA1.46684@newssvr29.news.prodigy.com>
Source record: 92660

Reg:
Not an absolute , but just indicitave of the sensitivity of these- is when used as a tone finder on telco cables (with a butt set, or "buttinski"), and applying a tone on a pair at -10 dBm-- Ground one conductor of the butt set, and hold the other clip in your hand. just use your finger (body resistance), and run the pairs one conductor at a time, and the tone will be heard on all the pairs, tho the LOUDEST tone is on the pair tone sent on! This is an old telco installers trick, and gives a great indication of just how sensitive these high impedence headsets really are! As info, Jim NN7K

Harry Whitfield wrote:
> In article <cc1pg6$5c4$1@hercules.btinternet.com>, Reg Edwards
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>
>>I am writing a program involving an antenna plus two coupled tuned circuits
>>plus a matched simple receiver.
>>
>>I would like to know, crudely, the audio power input level to 2000-ohm, iron
>>diaphragm headphones for a nice, comfortable, not too difficult listening
>>level. Such as when the phones are used on a crystal and cat's whisker
>>radio receiver.
>>
>>Such headphones are more sensitive than modern 8-ohm varieties. I have a
>>pair of 2000-ohm headphones but unfortunately no means of measuring power or
>>voltage input.
>>
>>Just the number of micro-watts please. At what low power input level does
>>speech or music just BEGIN to fade out to a person of normal hearing? Any
>>ideas? I could take the average of a few replies.
>>----
>>Reg, G4FGQ
>
>
> Reg,
>
> I (also) have a very old pair of Philips Hi-Fi headphones.
>
> The spec is given as 2 x 600 ohm (they are stereo phones).
>
> Sensitivity is given as 112dB at 1mW.
>
> I assume this means 112dB above the Threshold of Hearing (1pW per

> square metre) at 1mW in.
>
> A power input of 1nW would given a sound level of 52dB, which would be
> at a normal (comfortable) level.
>
> A power input of 1pW would give a sound level of 22dB, which would be
> at whisper level.
>
> These headphones would appear to be more sensitive than the S G Brown
> type F headphones.
>
> Harry.

90. Re: Antenna in mountain

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 15:52:37 UTC
From: billybeeper@juno.com
Message-ID: <1e4e3692.0407030752.5a959933@posting.google.com>
Source record: 92661

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<a0e8e01r1cjcbf32gb3vmbeq0ald2rbevc@4ax.com>...
> Hi Guys,
>
> On Thu, 1 Jul 2004 14:30:28 +0200, "Helmut" <MyCallSign@qsl.net>
> wrote:
>
> >Bernhard,
> >
> >Please keep in mind, that VHF and UHF do verry much reflect from your
> >surrounding "masks", and you would not believe what is possible to reach
> >without line of sight.
>
> Although my situation may not be "Alpine," I do live between two
> mountain ranges in hilly country (terrain varies 200M through many
> river valleys). To the East are the Cascade Range with more than the
> average density of Volcanos (think Mt. St. Helens or Mt. Ranier, or
> Mt. Hood, or ,,,) which stand in the 4000M area. However, they are
> exceptions to the general rule, because the surrounding Cascades are
> rather smaller at maybe half to 2/3rds those big guns.
>
> To the west we have the Olympic Mountain Range which are on par with
> the Cascades for height. Living between them, my friend often find
> they can get better contacts by aiming their beams 180ï¿½ to their
> target because there is a small hill in the way and the reflections
> off the mountains behind give more than enough signal.
>
> There is also the phenomenon of knife edge diffraction that occurs at
> these hill's peaks or ridges. Myself, I live behind a hill that
> interferes with my buddy's repeater. I live at 100M above sea level
> (Puget Sound), the hill rises to 150M and masks the repeater antenna.
> I use RadioMobile software to map the geographic distribution of RF:
> http://www.qsl.net/aa7uj/
> or
> http://www.qsl.net/aa7uj/coverage/10m-1uv.jpg
> which is one of several footprints, this one being the 1 ï¿½V
> sensitivity service area (shown in orange) for the 10M repeater.
>
> Now, if the concern is with HF bands, then that is probably more a
> concern of DX coverage (not suited to RadioMobile as it is principally
> line of sight oriented). There I use VOAWIN which is a gargantuan and
> very busy propagation modeler. An example of this is found at:
> http://www.qsl.net/kb7qhc/propagation/index.htm
>

> The first pass analysis of how much terrain impacts your signal can be
> evaluated by simply looking at the peaks. How many degrees above the
> horizontal do they rise? If less than 10ï¿½ then no big deal. If more
> than 50ï¿½ then you must be living in a cave (most slopes are rarely
> steeper than 20-30ï¿½). I must say there are exceptions like deep
> valleys. Last week I was in the Royal Gorge that is 400M deep and
> maybe 100M wide.
>
> 73's
> Richard Clark, KB7QHC

Also consider NVIS below 10 MHz. It will get you over the mountain
and talking to your neighbors.

91. Re: 300 Ohm Twin Lead Antenna Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 16:39:41 UTC
From: dplatt@radagast.org
Message-ID: <10edoadb9s9l1c6@corp.supernews.com>
Source record: 92662

>Is this feed, suitable for ham purposes (transmission power: max 100W) ?

It's certainly useable. For a short run, the losses would probably be acceptable (20 gauge conductors aren't great but aren't terrible) especially when it's dry and in new condition. In wet weather it's going to be lossier than ladder line or open-wire line, although at HF frequencies this additional loss may not be significant.

If you try to use it with an antenna which is badly mismatched for the frequency, the high SWR on the line might lead to significant heating of the line at 100 watts - this will depend on the impedances involved. I have no idea whether the foam dielectric in the cable would be adversely affected by the heat buildup at the high-current spots on the line, or might arc over at the high-voltage spots.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

92. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 16:51:47 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10edp13kath9421@corp.supernews.com>
Source record: 92663

Cecil Moore wrote:

> Russ wrote:
>
>> Where does it say that I (or you) should be
>> provided health care at government expense? I and my whole extended
>> family have been providing our own health care for decades now, with
>> the help of our employers. We trade our skills and knowledge for
>> money and benefits.
>
>
> I want the government to give me some Hawaiian beach front property
> as part of my socialized welfare package.
>
>
How about some Arizona beach front?

93. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 18:19:30 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040703141930.13659.00000967@mb-m12.aol.com>
Source record: 92664

>How about some Arizona beach front?
>

OK with me if it has antenna farm on it.

BUm

94. Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 18:25:11 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <bSCFc.101572$2o2.5813107@twister.southeast.rr.com>
Source record: 92665

Subject says it all

95. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 18:41:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <70bbe096kijvu0k0tt216faho1b62af5gs@4ax.com>
Source record: 92666

On Thu, 1 Jul 2004 19:43:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

> I could take the average of a few replies.

Hi All,

Perhaps an exercise useful to approximate within 2 or 3 orders of
magnitude.

The problem with measuring against the physiological response (aka
hearing, seeing, and the other senses) is that we "own" the estimate
as a personal expression of our integrity (how could be wrong?).
Problem is that such measurements are invariably fraught with the
widest error spread imaginable.

For a simple correlation (based on the cool, calm, detachment of
instrumentation) I noted the specifications for my speakers (Pioneer
vintage mid 70s) which describe they are capable of producing a SPL
(sound pressure level) of 92dB @ 1M @ 1 Watt. They also supply a
chart of relative sensitivity across the band of 20-20000 Hz, Harmonic
distortion, Impedances (room and coil). The published variation shows
that premium equipment wanders to considerable degree (Z, nominally at
10 Ohms varies from 5 Ohms to a peaked 40 Ohms). Hence nearly every
audio specification is set at either 1KHz or 400Hz and those
practitioners know full well not to abstract them throughout their
hearing range (which they also know full well varies with even much
wilder swings).

Let's take that same 92dB @ 1M @ 1 Watt and compare to the several
reports of hi-Z headsets. The first translation is of course against
application. Headphones encompass far less distance than 1M. I will
arbitrarily assign a path link of 1cM for the ear canal and re-specify
my Pioneer speakers to 112dB @ 1W (basically with the ear pressed next
to the speaker cone).

If I simply derate the power to achieve to 2dB above the threshold of
hearing (110 of that same 112dB) the power is similarly derated to
1W / 10ï¿½ï¿½
or
10 picoWatts

On Thu, 01 Jul 2004 21:06:10 GMT, "H. Adam Stevens"
<mayaone@earthlink.net> wrote:
>I can report using Sennheiser hi impedance dynamic phones to monitor 600 ohm
>balanced broadcast audio signals ... The signal qualified as a good listening level as I
recall.

"good" is too inspecific to derate to threshold power level.

On 01 Jul 2004 22:57:11 GMT, jgboyles@aol.com (JGBOYLES) wrote:
>a 1000 ohm crystal earphone. The diode drop would be around 250 millivolts, and the
>listening level would be fine.
"fine" is too inspecific to derate to threshold power level.

On Thu, 01 Jul 2004 23:44:01 GMT, "owen.home" <owen.home@ntlworld.com>
wrote:
> I dont think they were as high as 2k but they were not low Z so probably 600ohms and very
>sensitive ... could just hear -60dBm
"just hear" suggests threshold at 1 nanoWatt or 1000 picoWatts
or
2 orders of magnitude worse than my speakers.

On Thu, 1 Jul 2004 20:55:15 -0500, "Nick Kennedy" <wa5bdu@yahoo.com>
wrote:
> iron diaphragm, engraved on the back
>"Cannonball Dixie, E.F. Cannon Co., Springwater, N.Y., U.S.A"
>I measured the resistance of each can at a little over 1000 ohms.
>The sound was clearly audible but not strong. ... 0.084 uW.
"clearly audible" is inspecific, however
84 nanoWatts or 84000 picoWatts
or
nearly 4 orders of magnitude worse than my speakers.

On Fri, 2 Jul 2004 13:39:59 +0000 (UTC), Harry Whitfield
<g6auc@invalid.net> wrote:
>Test with S G Brown Type F Headphones
>0.001 [Vrms] Threshold [@ 1KHz]
[and in a follow-up]
>The DC resistance is 3860 ohm.
>We are in the region of 250 pW !
[and a third follow-up]
>I (also) have a very old pair of Philips Hi-Fi headphones.
>The spec is given as 2 x 600 ohm (they are stereo phones).
>Sensitivity is given as 112dB at 1mW.
-whew!- 2dB level at 10 femtoWatts

Harry offers the wildest variation. His first SG Browns are
25 times worse than my speakers
however his Philips Hi-Fi headphones
3 orders of magnitude better than my speakers!

Hence, as an average, response to this question spans roughly 7 orders
of magnitude.

As the quality of unzipped (and unrevealed design) software goes, such
a spread could easily satisfy anyone, even boys in their treehouse
with a string and dixie cup telephone system.

What accounts for this ENORMOUS swing of response to a simple
enquiry? The human element of owning what amounts to "dead

reckoning." The perception of sound is individual, not absolute. Through the survey above it also suffers in reporting too few variables. In other words, just what dB level satisfies such qualities as "just hear" "clearly audible" "good" "fine" and any other subjective qualifiers? The nearly 7 decades of variation cover roughly half the hearing range between threshold and pain - 140dB. Obviously if we trimmed 40dB from each end, the middle zone of the remaining 60dB suddenly becomes "average" listening levels for "someone."

Well, I hope you guys enjoyed this tour of the fantastic improbability of human sensation rendered to a fixed number. ;-)

73's
Richard Clark, KB7QHC

96. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 19:39:13 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <BXDFc.6389$qw1.906@nwrddc01.gnilink.net>
Source record: 92668

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>
> Round, square, solid rod, tube, wall thickness, soft drawn,
hard drawn, annealed?

W4OP

97. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 19:46:06 UTC
From: "k.simons" <tk220@sdf.com>
Message-ID: <22EFc.519$hW3.29@newsfe5-win.ntli.net>
Source record: 92667

No it doesn't, it doesn't say what it is for!

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>
>

98. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 20:49:48 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <MZEFc.18136$a24.17935@attbi_s03>
Source record: 92669

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>

For 1.5 inch copper pipe - check any of your larger plumbing distributors
(size is used for sewer/waste pipe)
PVC has replaced it usage over the last 30 years -- in some localities.
With the amount of home building in the Carolinas
- this should not be to difficult to locate. However, you may be surprised
at cost (copper commodity prices have been quite high - lately)

w9gb

99. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 20:53:32 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <g1FFc.18144$a24.16612@attbi_s03>
Source record: 92670
Body handling: Inline uuencoded payload not displayed: blue-bullet.gif

"Andrew" <spidrw@gnt.net> wrote in message
news:d8c667d9.0407021639.35623f37@posting.google.com...
> I've got a 2 meter antenna for my mobile unit, and I'm wondering if it
> could double as a GPS antenna. I've got a friend, who 5 years ago
> showed me how he had his laptop running MS Streets & Trips hooked to a
> GPS receiver. I'm not sure if he had a standalone receiver meant for
> laptop use, or somehow used his ham antenna and another receiver. Any
> ideas?
>
> Thanks,
> Andrew Weber
> KG4OTT

Andrew -

You should investigate the usage of a mobile antenna, such as the GPSx
Survivor by Antenex, 2000-205 Bloomingdale Road Glendale Heights, Illinois
60139
http://www.antenex.com/

GPSx Survivor - Model GPSDVHF
This very durable antenna features a 26dB gain active ceramic patch GPS
receive antenna with a durable black chrome plated, shock spring protected
VHF • wave antenna in one complete package.
The real advantage of this antenna is its mechanical integrity. This dual
band antenna is constructed with a fully potted heavy wall resin housing, a
one-piece solid brass mounting stud, a large diameter tapered shock spring
and a tunable 0.100" diameter 17-7ph stainless steel radiator for VHF. All
of this makes it perfect for heavy equipment asset tracking and monitoring.

It comes complete with 14 feet of RG174 terminated with an SMB connector for
GPS and 14 feet RG58A/U terminated with N connector. It is mounted through a
5/8" diameter mounting hole and secured with an included heavy stainless
steel jam nut.

w9gb

[Inline uuencoded payload not displayed: blue-bullet.gif]

100. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 21:23:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l54be01ikr1s41cbhs96bviluesrjhotbd@4ax.com>
Source record: 92671

On Thu, 1 Jul 2004 19:43:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

> I could take the average of a few replies.

Hi All,

Perhaps an exercise useful to approximate within 2 or 3 orders of magnitude.

The problem with measuring against the physiological response (aka hearing, seeing, and the other senses) is that we "own" the estimate as a personal expression of our integrity (how could be wrong?). Problem is that such measurements are invariably fraught with the widest error spread imaginable.

For a simple correlation (based on the cool, calm, detachment of instrumentation) I noted the specifications for my speakers (Pioneer vintage mid 70s) which describe they are capable of producing a SPL (sound pressure level) of 92dB @ 1M @ 1 Watt. They also supply a chart of relative sensitivity across the band of 20-20000 Hz, Harmonic distortion, Impedances (room and coil). The published variation shows that premium equipment wanders to considerable degree (Z, nominally at 10 Ohms varies from 5 Ohms to a peaked 40 Ohms). Hence nearly every audio specification is set at either 1KHz or 400Hz and those practitioners know full well not to abstract them throughout their hearing range (which they also know full well varies with even much wilder swings).

Let's take that same 92dB @ 1M @ 1 Watt and compare to the several reports of hi-Z headsets. The first translation is of course against application. Headphones encompass far less distance than 1M. I will arbitrarily assign a path link of 1cM for the ear canal and re-specify my Pioneer speakers to 112dB @ 1W (basically with the ear pressed next to the speaker cone).

If I simply derate the power to achieve to 2dB above the threshold of hearing (110 of that same 112dB) the power is similarly derated to
1W / 10ï¿½ï¿½
or
10 picoWatts

On Thu, 01 Jul 2004 21:06:10 GMT, "H. Adam Stevens"
<mayaone@earthlink.net> wrote:
>I can report using Sennheiser hi impedance dynamic phones to monitor 600 ohm
>balanced broadcast audio signals ... The signal qualified as a good listening level as I recall.

"good" is too inspecific to derate to threshold power level.

On 01 Jul 2004 22:57:11 GMT, jgboyles@aol.com (JGBOYLES) wrote:
>a 1000 ohm crystal earphone. The diode drop would be around 250 millivolts, and the
>listening level would be fine.
"fine" is too inspecific to derate to threshold power level.

On Thu, 01 Jul 2004 23:44:01 GMT, "owen.home" <owen.home@ntlworld.com>
wrote:
> I dont think they were as high as 2k but they were not low Z so probably 600ohms and very
>sensitive ... could just hear -60dBm
"just hear" suggests threshold at 1 nanoWatt or 1000 picoWatts
or
2 orders of magnitude worse than my speakers.

On Thu, 1 Jul 2004 20:55:15 -0500, "Nick Kennedy" <wa5bdu@yahoo.com>
wrote:
> iron diaphragm, engraved on the back
>"Cannonball Dixie, E.F. Cannon Co., Springwater, N.Y., U.S.A"
>I measured the resistance of each can at a little over 1000 ohms.
>The sound was clearly audible but not strong. ... 0.084 uW.
"clearly audible" is inspecific, however
84 nanoWatts or 84000 picoWatts
or
nearly 4 orders of magnitude worse than my speakers.

On Fri, 2 Jul 2004 13:39:59 +0000 (UTC), Harry Whitfield
<g6auc@invalid.net> wrote:
>Test with S G Brown Type F Headphones
>0.001 [Vrms] Threshold [@ 1KHz]
[and in a follow-up]
>The DC resistance is 3860 ohm.
>We are in the region of 250 pW !
[and a third follow-up]
>I (also) have a very old pair of Philips Hi-Fi headphones.
>The spec is given as 2 x 600 ohm (they are stereo phones).
>Sensitivity is given as 112dB at 1mW.
-whew!- 2dB level at 10 femtoWatts

Harry offers the wildest variation. His first SG Browns are
25 times worse than my speakers
however his Philips Hi-Fi headphones
3 orders of magnitude better than my speakers!

Hence, as an average, response to this question spans roughly 7 orders
of magnitude.

As the quality of unzipped (and unrevealed design) software goes, such
a spread could easily satisfy anyone, even boys in their treehouse
with a string and dixie cup telephone system.

What accounts for this ENORMOUS swing of response to a simple
enquiry? The human element of owning what amounts to "dead

reckoning." The perception of sound is individual, not absolute. Through the survey above it also suffers in reporting too few variables. In other words, just what dB level satisfies such qualities as "just hear" "clearly audible" "good" "fine" and any other subjective qualifiers? The nearly 7 decades of variation cover roughly half the hearing range between threshold and pain - 140dB. Obviously if we trimmed 40dB from each end, the middle zone of the remaining 60dB suddenly becomes "average" listening levels for "someone."

Well, I hope you guys enjoyed this tour of the fantastic improbability of human sensation rendered to a fixed number. ;-)

73's
Richard Clark, KB7QHC

101. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 21:24:07 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <inFFc.19569$XM6.9100@attbi_s53>
Source record: 92672

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>
> Well, not really. Do you want copper pipe? Copper strap, Copper braid?

1-1/2 pipe from your local hardware store.

Williams Hardware, Hendersonville, NC

Copper strap

Graybar, Asheville, NC

W4ZCB

102. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 21:26:51 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <vwFFc.19589$XM6.3629@attbi_s53>
Source record: 92673

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>
> Well, not really. Do you want copper pipe? Copper strap, Copper braid?

1-1/2 pipe from your local hardware store.

Williams Hardware, Hendersonville, NC

Copper strap

Graybar, Asheville, NC

W4ZCB

103. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 21:29:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q48be05ljcl9902p14scudibkc6df6d39q@4ax.com>
Source record: 92674

On Thu, 1 Jul 2004 19:43:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

> I could take the average of a few replies.

Hi All,

Perhaps an exercise useful to approximate within 2 or 3 orders of magnitude.

The problem with measuring against the physiological response (aka hearing, seeing, and the other senses) is that we "own" the estimate as a personal expression of our integrity (how could be wrong?). Problem is that such measurements are invariably fraught with the widest error spread imaginable.

For a simple correlation (based on the cool, calm, detachment of instrumentation) I noted the specifications for my speakers (Pioneer vintage mid 70s) which describe they are capable of producing a SPL (sound pressure level) of 92dB @ 1M @ 1 Watt. They also supply a chart of relative sensitivity across the band of 20-20000 Hz, Harmonic distortion, Impedances (room and coil). The published variation shows that premium equipment wanders to considerable degree (Z, nominally at 10 Ohms varies from 5 Ohms to a peaked 40 Ohms). Hence nearly every audio specification is set at either 1KHz or 400Hz and those practitioners know full well not to abstract them throughout their hearing range (which they also know full well varies with even much wilder swings).

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If I simply derate the power to achieve to 2dB above the threshold of hearing (110 of that same 112dB) the power is similarly derated to
1W / 10ï¿½ï¿½
or
10 picoWatts

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<mayaone@earthlink.net> wrote:
>I can report using Sennheiser hi impedance dynamic phones to monitor 600 ohm
>balanced broadcast audio signals ... The signal qualified as a good listening level as I recall.

"good" is too inspecific to derate to threshold power level.

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>sensitive ... could just hear -60dBm
"just hear" suggests threshold at 1 nanoWatt or 1000 picoWatts
or
2 orders of magnitude worse than my speakers.

On Thu, 1 Jul 2004 20:55:15 -0500, "Nick Kennedy" <wa5bdu@yahoo.com>
wrote:
> iron diaphragm, engraved on the back
>"Cannonball Dixie, E.F. Cannon Co., Springwater, N.Y., U.S.A"
>I measured the resistance of each can at a little over 1000 ohms.
>The sound was clearly audible but not strong. ... 0.084 uW.
"clearly audible" is inspecific, however
84 nanoWatts or 84000 picoWatts
or
nearly 4 orders of magnitude worse than my speakers.

On Fri, 2 Jul 2004 13:39:59 +0000 (UTC), Harry Whitfield
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>Test with S G Brown Type F Headphones
>0.001 [Vrms] Threshold [@ 1KHz]
[and in a follow-up]
>The DC resistance is 3860 ohm.
>We are in the region of 250 pW !
[and a third follow-up]
>I (also) have a very old pair of Philips Hi-Fi headphones.
>The spec is given as 2 x 600 ohm (they are stereo phones).
>Sensitivity is given as 112dB at 1mW.
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Hence, as an average, response to this question spans roughly 7 orders
of magnitude.

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reckoning." The perception of sound is individual, not absolute. Through the survey above it also suffers in reporting too few variables. In other words, just what dB level satisfies such qualities as "just hear" "clearly audible" "good" "fine" and any other subjective qualifiers? The nearly 7 decades of variation cover roughly half the hearing range between threshold and pain - 140dB. Obviously if we trimmed 40dB from each end, the middle zone of the remaining 60dB suddenly becomes "average" listening levels for "someone."

Well, I hope you guys enjoyed this tour of the fantastic improbability of human sensation rendered to a fixed number. ;-)

73's
Richard Clark, KB7QHC

104. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 21:29:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fcbbe01ea0h604rmffl9qev5h8dnq2jbfe@4ax.com>
Source record: 92675

On Sat, 03 Jul 2004 18:41:00 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Well, I hope you guys enjoyed this tour of the fantastic improbability
>of human sensation rendered to a fixed number. ;-)
>
It just occurred to me that my mock response of
43
is as good as any - who is to challenge it to any accuracy? :-)

Units?
[choose one] femto, pico, nano Watts ï¿½3dB

Punchinello,

I hope you appreciate that you have in fact succeeded in providing
your quota of chuckles. In fact it is MY responsibility to THANK YOU
for the fun (see? it is not so hard to be gracious).

73's all
Richard Clark, KB7QHC

105. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 21:43:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e72954_8@corp.newsgroups.com>
Source record: 92676

David G. Nagel wrote:
> Cecil Moore wrote:
>> I want the government to give me some Hawaiian beach front property
>> as part of my socialized welfare package.
>>
> How about some Arizona beach front?

Already had that in Queen Creek, AZ - took a loss on it.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

106. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 22:48:44 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10eedubnjsli17e@corp.supernews.com>
Source record: 92677

Yuri Blanarovich wrote:

>>How about some Arizona beach front?
>>
>
>
> OK with me if it has antenna farm on it.
>
> BUm
You will have to plant your own antenna seeds!!!

107. Re: 2 meter GPS antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 23:25:33 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <rvfee0h99od1njg510kh5v8utp3f01m1f8@4ax.com>
Source record: 92678

On Sat, 03 Jul 2004 20:53:32 GMT, "G.Beat"
<now9spamgb@no.comcast.spam.net> wrote:

>You should investigate the usage of a mobile antenna, such as the GPSx
>Survivor by Antenex, 2000-205 Bloomingdale Road Glendale Heights, Illinois
>60139
>http://www.antenex.com/
>
>GPSx Survivor - Model GPSDVHF
>This very durable antenna features a 26dB gain active ceramic patch GPS
>receive antenna with a durable black chrome plated, shock spring protected
>VHF ï¿½ wave antenna in one complete package.
>The real advantage of this antenna is its mechanical integrity. This dual
>band antenna is constructed with a fully potted heavy wall resin housing, a
>one-piece solid brass mounting stud, a large diameter tapered shock spring
>and a tunable 0.100" diameter 17-7ph stainless steel radiator for VHF. All
>of this makes it perfect for heavy equipment asset tracking and monitoring.
>
>It comes complete with 14 feet of RG174 terminated with an SMB connector for
>GPS and 14 feet RG58A/U terminated with N connector. It is mounted through a
>5/8" diameter mounting hole and secured with an included heavy stainless
>steel jam nut.
>
Sounds like a good solution.

However, I would not call that a dual band antenna, but two different
antennas mounted in the same package.

How is the active GPS antenna powered?

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

108. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 23:27:36 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10eeg717pghmn92@corp.supernews.com>
Source record: 92679

Dear Tam:
During WW2 the value was changed. UK, Canada, and USA each had a
slightly different value. Became a problem with things having threads.
I think that the Canadian value won. Now: one inch is 25.4 mm
exactly.

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:GNqdnVo3h9tvtnvdRVn-sw@comcast.com...
>
<snip>
> > >
> > >10 meters = 32.8 feet
> > >11 meters = 36.1 feet
> > >
> > >A meter is approximately 3 feet and 3 inches NOT just 3 feet.
Those
> inches
> > >add up after a while.
> > >
> > >Dee D. Flint, N8UZE
> >
> > Yes, this is how I bombed in basic Trigonometry and decided to not
> > become an an Electrical Engineer :-)
> >
> > Bob
> > k5qwg
> >
> >
> I tend to remember that a meter is 39.37 inches. Makes for an extra
step,
> but fewer numbers to remember.
>
> Tam/WB2TT
>
>

109. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-03 23:32:09 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <15gee0h5b2mnock7r3i8tdeggj6f3c509n@4ax.com>
Source record: 92680

On Sat, 03 Jul 2004 18:25:11 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>Subject says it all
>
The subject is rather vague, as others have pointed out.

The teensiest hint on exactly what you want, and/or what you plan to
use it for, would probably get you more useful responses. This
includes quantity.

McMaster-Carr at www.mcmaster.com can ship you a large variety of
metal stock, including various grades of copper.

There are size limits on what they can ship, and they may not be the
least expensive option for larger quantities, but always simple, with
a wide selection, and fast.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

110. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:06:27 UTC
From: NN7K - Jim <nn7kexk7zfgnospam@sbcglobal.net>
Message-ID: <7SHFc.6087$RF.1131@newssvr25.news.prodigy.com>
Source record: 92681

I want the government to give me some Hawaiian beach front property
>> as part of my socialized welfare package.
>>
>>
> How about some Arizona beach front?
>

Sounds GREAT , especially if the OCEAN is on the SOUTH of the property!
See if those wetbacks can REALLY SWIM !! NN7K

111. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:08:49 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <IUHFc.20679$Oq2.3740@attbi_s52>
Source record: 92682

Cecil Moore wrote:
> Russ wrote:
>
>> Where does it say that I (or you) should be
>> provided health care at government expense? I and my whole extended
>> family have been providing our own health care for decades now, with
>> the help of our employers. We trade our skills and knowledge for
>> money and benefits.
>
>
> I want the government to give me some Hawaiian beach front property
> as part of my socialized welfare package.
>
>

And Kerry will pay for it!! Yeah, sure!!
43 million americans don't have health care. It costs about $10,000 per person per year for health care. So, 43 million times 10,000 = 430 BILLION $$$$$$$$$$$$$. That's more than his wife's fortune!

112. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:42:05 UTC
From: cva <bn@art.com>
Message-ID: <cc7jo90v1j@enews2.newsguy.com>
Source record: 92683

R. Scott wrote:

>Gawd I hate it when Jr High lets out and mommy and daddy dont look
>to see what the brat is up to on the computer
>
>
>
Gawd I hate it when ignorant bush loving trash can't pull their head out.

113. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:45:08 UTC
From: cva <bn@art.com>
Message-ID: <cc7ju30v9h@enews2.newsguy.com>
Source record: 92684

Cecil Moore wrote:

> Russ wrote:
>
>> Where does it say that I (or you) should be
>> provided health care at government expense? I and my whole extended
>> family have been providing our own health care for decades now, with
>> the help of our employers. We trade our skills and knowledge for
>> money and benefits.
>
>
> I want the government to give me some Hawaiian beach front property
> as part of my socialized welfare package.
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

The government isn't going to 'give' you anything. But you should expect
something back from the federal taxes that are taken from you. I'm mean
something other than a scam war that has murdered 850 american soldiers.
War crime trials for Bush not Hussein!!!!!

114. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:46:16 UTC
From: cva <bn@art.com>
Message-ID: <cc7k041v9h@enews2.newsguy.com>
Source record: 92685

Dave Shrader wrote:

> Cecil Moore wrote:
>
>> Russ wrote:
>>
>>> Where does it say that I (or you) should be
>>> provided health care at government expense? I and my whole extended
>>> family have been providing our own health care for decades now, with
>>> the help of our employers. We trade our skills and knowledge for
>>> money and benefits.
>>
>>
>>
>> I want the government to give me some Hawaiian beach front property
>> as part of my socialized welfare package.
>>
>>
>
> And Kerry will pay for it!! Yeah, sure!!
> 43 million americans don't have health care. It costs about $10,000
> per person per year for health care. So, 43 million times 10,000 = 430
> BILLION $$$$$$$$$$$$$. That's more than his wife's fortune!
>
But only twice the amount (so far) of what that the murderous scam Iraq war.

115. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:52:27 UTC
From: cva <bn@art.com>
Message-ID: <cc7kbq0vlr@enews2.newsguy.com>
Source record: 92686

Russ wrote:

>On Fri, 02 Jul 2004 08:25:19 -0700, cva <bn@art.com> wrote:
>
>
>
>>Russ wrote:
>>
>>
>>
>>>On Thu, 01 Jul 2004 09:28:36 -0700, cva <bn@art.com> wrote:
>>>
>>>
>>>
>>>
>>>
>>>>Bill Turner wrote:
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>>That would be "makes" etc, etc, look stupid.
>>>>>
>>>>>Got a mirror?
>>>>>
>>>>>
>>>>>
>>>>>
>>>>>
>>>>>
>>>>>
>>>>go ahead and look in the mirror you stupid bush supporter.
>>>>we have a war on terrr. the enemy is at our doorstep. we must
>>>>defeat that enemy. fuck you bush you digusting coward. send
>>>>your daughters to iraq.
>>>>
>>>>too bad a simple boy like you has to resort to spelling correction
>>>>cause ya have no brains to formulait a argumment. keep that spellin
>>>>correctin program handy. keep on suckin bush cock.
>>>>
>>>>
>>>>
>>>>

>>>As I have said over and over again, the commies are haters, pure and
>>>simple. Nothing comes out of them but venom, spite and treason. They
>>>have no better ideas nor even good ones. Go ahead, make some real,
>>>cogent, thought-out solutions for some real-world problems like
>>>keeping terrorism away from our children. You won't however; you will
>>>only answer with more leftist poison.
>>>
>>>Russ
>>>
>>>
>>>
>>>
>>Shove you commie leftest crap high up your ass. Bush is a digusting
>>dictator and should be put on trial for war crimes. Who should be on
>>trial for war crimes Bush or Saddam? Bush of course.
>>We need to take back this country from this incompetent jackass....
>>get universal health care for all Americans, kick out every God Damn
>>illegal alien, rip up all of those unfair trade agreements and make new
>>ones that favor Americans. Then Bush should apologize to the French..
>>because THEY were right about the WMDs. Bush has made America
>>the joke of the world. "We have a wor on terrr... the enemy is at oor
>>dorstep.
>>we must defeat this enemy.. they don't want freedom"" FUCK YOU BUSH
>>you stupid ignorant texas pile of crap.
>>Health care for EVERY AMERICAN. 260 billion american $ diverted from
>>americans to Iraq. CRIME OF THE CENTURY!!!
>>
>>
>
>I guess I'm right. Nothing but bile, venom and hate. You can't
>think, probably as a result of the leftist indoctrination you received
>in the public schools instead of an education. I'll answer just one
>of your "points". Where does it say that I (or you) should be
>provided health care at government expense? I and my whole extended
>family have been providing our own health care for decades now, with
>the help of our employers. We trade our skills and knowledge for
>money and benefits. Work is great thing. You should consider getting
>some. Better yet, you should start a business. That will get your
>head on straight faster than anything.
>
>Russ
>
>
>
You can't think straight... probably because of your nazi-like
indoctrination
from the republican. Where does it say taxes will be taken from me to
rebuild
a digusting Islamic government half way across the world. I'd rather have my
taxes pay for health care for every American. Means tested. If you are

rich you
pay more. If you are poor, its free. The poorest bum on the street
doesn't have
any better access to the system than the richest person in the country.
Its right
and you know it. But I'm sure a selfish person like yourself could never
see it
the right way. Everyone pays something out of their pocket if they are able.

116. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 00:52:46 UTC
From: cva <bn@art.com>
Message-ID: <cc7kcb1vlr@enews2.newsguy.com>
Source record: 92687

Bill Turner wrote:

>On Fri, 02 Jul 2004 08:25:19 -0700, cva <bn@art.com> wrote:
>
>
>
>>Shove you commie leftest crap high up your ass. Bush is a digusting
>>dictator and should be put on trial for war crimes. Who should be on
>>trial for war crimes Bush or Saddam? Bush of course.
>>We need to take back this country from this incompetent jackass....
>>get universal health care for all Americans, kick out every God Damn
>>illegal alien, rip up all of those unfair trade agreements and make new
>>ones that favor Americans. Then Bush should apologize to the French..
>>because THEY were right about the WMDs. Bush has made America
>>the joke of the world. "We have a wor on terrr... the enemy is at oor
>>dorstep.
>>we must defeat this enemy.. they don't want freedom"" FUCK YOU BUSH
>>you stupid ignorant texas pile of crap.
>>Health care for EVERY AMERICAN. 260 billion american $ diverted from
>>americans to Iraq. CRIME OF THE CENTURY!!!
>>
>>
>
>_____
>
>Yawn.
>
>
>
puke

117. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 03:02:44 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040703230244.12089.00001231@mb-m01.aol.com>
Source record: 92688

> I'm mean

Yea, you mean allright!

118. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 04:08:47 UTC
From: richardharrison@webtv.net
Message-ID: <22773-40E782CF-164@storefull-3255.bay.webtv.net>
Source record: 92689

Richard Clark wrote:
"It just occiurred to me that my mock response of 43 is as good as
any-....."

Almost, but the subject does have reference points though "threshold of hearing" has almost as many values as there are people, or maybe more than the population, depending on conditions.

Keith Henney in his 1938 "Principles of Radio" says:
"Loudspeakers in general are notoriously inefficient - the best in common use is not over 30 per cent. Most of them are less than 5% efficient."

In the years since 1938, efficiency has not made a big improvement. Headphones are likewise inefficient and vary widely from sample to sample.

Harold Ennes says in "Broadcast Maintenance":
"A level of 0.0002 dyne per square centimeter is considered to be the threshold of audibility."

According to Fig 1-4 in the Ennes book, this is an intensity of 0 db. A sound pressure of 0.00002 dynes per square centimeter is a sound intensity of -20 dB, while 0.002 dynes per square centimeter is +20 dB.

Broadcast microphones are said to produce a power output of from -50 to -65 dBm at a sound pressure of 10 dynes per square centimeter.

Sound transducers are said to vary by 15 dB in sensitivity among those of the best quality, and that is at a particular reference frequency and without variations which depend on the location of the source with respect to the microphone above. Then think of a comparison of individual response curves of sound transducers. It`s somewhat chaotic.

A description of headphone performance can be made which can be useful to compare performance despite all of the problems. Microphones and headsets of WW-2 are charted in "Electrical Communication Systems Engineering" published by the War Department in April 1945. Useful characterizations can also be made of other sound transducers.

Best regards, Richard Harrison, KB5WZI

119. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 04:18:50 UTC
From: richardharrison@webtv.net
Message-ID: <22773-40E7852A-165@storefull-3255.bay.webtv.net>
Source record: 92690

Yuri, K3BU wrote:
"Yea, you mean allright!"

You tell em Yuri!

A glorious and happy July 4 to all.

Best reghards, Richard Harrison, KB5WZI

120. wierd wire on my hands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 05:16:10 UTC
From: eternalsquire@comcast.net
Message-ID: <904dab11.0407032116.3e99d646@posting.google.com>
Source record: 92691

Hi,

I've presently installed the best antenna that I could. I made major miscalculations on my layout.

Turns out that maximum height of trees and building is 20 feet. Balcony
rail height is 12 feet.

The best I could presently do is make a balanced wire in the horizontal plane.
It is basically a dipole whose endpoints are 15 degrees apart rather than 180.

Length of one arm is 40 feet, the length of the other arm is 45. It is number 30 kynar insulated wire supported by 12 inches of nylon cord at at each end off balconies across the lawn. Altitude is 12 feet. I am in a desert climate,
violent weather is almost unknown except for 2 months out of the year where we have monsoons. By my experience, number 30 wire is too thin for the air to push very or to be affected by the rain.

I think this will have to be a receiving wire, i don't believe I have the necessary take off angles for dx.

Any suggestions for improving this situation?

Thanks,

The Eternal Squire

121. looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 06:28:59 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.04.06.28.59.321917@127.0.0.1>
Source record: 92692

I am in the market for a used 10 meter ringo antenna (I believe vushcraft made this a long while back). I can't seem to find a local supplier for one. Anyone that happens to have one handy and is willing to sell at a reasonable price. I can be reached at n7zzt(at)hotmail(dot)com.

thanks.

DE N7ZZT
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence has its limits.

122. Re: Sensifivity of 2000-ohm Headphones

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 07:02:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uv9fe0tm4m1vnreccgh707jp19n7506dtv@4ax.com>
Source record: 92693

On Sat, 03 Jul 2004 18:41:00 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Let's take that same 92dB @ 1M @ 1 Watt and compare to the several
>reports of hi-Z headsets. The first translation is of course against
>application. Headphones encompass far less distance than 1M. I will
>arbitrarily assign a path link of 1cM for the ear canal and re-specify
>my Pioneer speakers to 112dB @ 1W (basically with the ear pressed next
>to the speaker cone).
>
Should be 132dB @ 1W - which, of course, does nothing to the spread of
reported responses. However, even this correction is fraught with
error because it presumes a free field (violated at the ear canal
where it becomes a pressure field) - well, such are the pitfalls of
computing with sound.

For those seriously interested in the Physics of sound, vibration, and
its measurement, the preeminent authority in this field is in Denmark
with Brï¿½el and Kjï¿½r:
http://www.bksv.com/pdf/Sound_Intensity.pdf
who offer microphones that can pick up sound 40dB below the threshold
of hearing.

By the way, one of the interesting points about their anechoic
chambers is mention that if you sat in one, you could hear your heart
beating (and this not just simply the blood pumping through veins near
the ears - which are self canceling anyway).

73's
Richard Clark, KB7QHC

123. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 10:25:26 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <gWQFc.9682$151.6832@fed1read02>
Source record: 92694

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:40e6b1b4$1_7@corp.newsgroups.com...
> Russ wrote:
> > Where does it say that I (or you) should be
> > provided health care at government expense? I and my whole extended
> > family have been providing our own health care for decades now, with
> > the help of our employers. We trade our skills and knowledge for
> > money and benefits.
>
> I want the government to give me some Hawaiian beach front property
> as part of my socialized welfare package.

Got any experience chopping pineapple?

Ed

124. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 10:28:42 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <jZQFc.9683$151.2930@fed1read02>
Source record: 92695

```
"cva" <bn@art.com> wrote in message news:cc7ju30v9h@enews2.newsguy.com...
> Cecil Moore wrote:
>
> > Russ wrote:
> >
> >> Where does it say that I (or you) should be
> >> provided health care at government expense? I and my whole extended
> >> family have been providing our own health care for decades now, with
> >> the help of our employers. We trade our skills and knowledge for
> >> money and benefits.
> >
> >
> > I want the government to give me some Hawaiian beach front property
> > as part of my socialized welfare package.
> >
> >
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > -----== Over 100,000 Newsgroups - 19 Different Servers! =-----
>
> The government isn't going to 'give' you anything. But you should expect
> something back from the federal taxes that are taken from you. I'm mean
> something other than a scam war that has murdered 850 american soldiers.
> War crime trials for Bush not Hussein!!!!!

Indeed, a war crimes trial for Sadaam is a waste; all he needs is an ounce
of lead.

Ed
wb6wsn
```

125. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 11:10:58 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <RzRFc.1811$O14.1014@lakeread03>
Source record: 92696

"Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
news:pan.2004.07.04.06.28.59.321917@127.0.0.1...
> I am in the market for a used 10 meter ringo antenna (I believe vushcraft
> made this a long while back). I can't seem to find a local supplier for
> one. Anyone that happens to have one handy and is willing to sell at a
> reasonable price. I can be reached at n7zzt(at)hotmail(dot)com.
>
> thanks.
>
> DE N7ZZT
> Phoenix, Arizona
>

They still make them, for amateur and commercial.

http://www.cushcraft.com/amateur/details.asp?catid=77

126. Re: Can i work 7~28 MHz with a 10 mt dipole?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 11:24:10 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <dMRFc.1812$O14.433@lakeread03>
Source record: 92697

"/* frank */" <__frank__@despammed.com> wrote in message
news:2kkam0F36l0lU1@uni-berlin.de...
> I can install only a dipole of about 10 meters
> (as inverted V).
>
> Is there any project, any commercial antenna
> of such length, that allow me to work all band
> 7 - 14 - 21 - 28 MHz ?
>
> Thanks

It's probably going to work like crap on 7 MHz. Consider buying
a GOOD tuner, and also try tricks like feeding the coax
common mode (shield and center tied together) to run your
ten meter dipole as a top loaded vertical wire. This assumes
you can run the coax or balanced line in a straight run away from
existing structures. You'll also need a good ground or a few
on the ground radials for the antenna to work against when
it is being run as a vertical. Don't be afraid to experiment.

Pete

127. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 12:27:35 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.04.12.27.35.571961@127.0.0.1>
Source record: 92698

On Sun, 04 Jul 2004 07:10:58 -0400, Uncle Peter wrote:

>
> "Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
> news:pan.2004.07.04.06.28.59.321917@127.0.0.1...
>> [quoted text muted]
>
> They still make them, for amateur and commercial.
>
> http://www.cushcraft.com/amateur/details.asp?catid=77

true enough. unfortunately, my budget won't support sending them $89.95
PLUS S&H.

if I had the design schematics, I'd have one built locally for the cost of
materials.

DE N7ZZT
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

128. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 12:36:35 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <5QSFc.1817$O14.140@lakeread03>
Source record: 92699

"Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
news:pan.2004.07.04.12.27.35.571961@127.0.0.1...
> On Sun, 04 Jul 2004 07:10:58 -0400, Uncle Peter wrote:
>
> > > if I had the design schematics, I'd have one built locally for the
cost of
> materials.
>
> DE N7ZZT
> Phoenix, Arizona
>

You can also download the PDF for the assembly manual. I'd
think you could get a good headstart homebrewing one from
there....

Pete k1zjh

129. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 12:37:33 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <6SSFc.9686$151.7486@fed1read02>
Source record: 92700

"Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
news:pan.2004.07.04.12.27.35.571961@127.0.0.1...
> On Sun, 04 Jul 2004 07:10:58 -0400, Uncle Peter wrote:
>
> >
> > "Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
> > news:pan.2004.07.04.06.28.59.321917@127.0.0.1...
> >> [quoted text muted]
> >
> > They still make them, for amateur and commercial.
> >
> > http://www.cushcraft.com/amateur/details.asp?catid=77
>
> true enough. unfortunately, my budget won't support sending them $89.95
> PLUS S&H.
>
> if I had the design schematics, I'd have one built locally for the cost of
> materials.
>
> DE N7ZZT
> Phoenix, Arizona

So, the locals around Phoenix work for free?

Ed
wb6wsn

130. Re: wierd wire on my hands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 13:11:46 UTC
From: 'Doc <ltdoc@yahoo.com>
Message-ID: <_ZmdnSvbybKOn3XdRVn_iw@cwis.net>
Source record: 92701

'Squire,
I think you may be correct, but don't 'rule out' the antenna for
transmitting yet. While the 'take off angle' may not be the 'best'
in the world (?) it certainly doesn't make your antenna 'deaf' (or
'mute', as the case may be)...
'Doc

131. Salt Water Canal antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 13:40:50 UTC
From: Steve Brenner <steevo40@yahoo.com>
Message-ID: <_ETFc.6116$w56.5994@bignews1.bellsouth.net>
Source record: 92702

Hi All,

I will be moving into a house with a salt water canal in the backyard.
The lot is about 100 feet wide on the canal with nothing but ceramic tile
surrounding a pool...NO open Ground just a few palm trees surrounded small
squares of mulch.....
I am looking for any ideas for an antenna....to cover 80-10 .....

Anybody have experience with salt water near by???

Thanks

Steve
KB8IPZ

132. Building a 51 mhz inverted V - feedpoint question....Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 16:14:58 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2kqonqF56rujU1@uni-berlin.de>
Source record: 92703

When I first moved into my 3rd floor (top floor) apartment 11 months ago, I wanted to get back on HF ASAP. So, I rounded up all the wire I had and made a 153'4" dipole with an SO-239 chassis mount at the feedpoint. I strung the antenna around this red brick building and was on the air with my FT-817 and LDG Z-11 tuner in no time. The antenna tuned easily even down to 1.8 mhz but I was running a straight piece of rg-58 coax from the feedpoint to the tuner and I was getting a lot of RF in the shack.

I posed this problem to this group and was told to coil several turns of coax at the feedpoint. I looked around for a form and found a 2-3/4" diameter
glue bottle. I wound 9 turns of the existing coax around this form, then used
superglue to hold the turns together. Came out rather nice and worked very well!

A few months later I was told I might get better results with more turns on a
larger form. I grabbed another spare coax piece and this time used a CD 50 pack round case for a form (5-1/4" dia, 12 turns). This worked even better!
In April I finally got permission to put an antenna or support no higher than
10 feet high on the roof of this apartment building as long as I did no permanent
changes. I used a Rat Shack vent pipe mount and 2 - 5 foot masts to hold up the top of a Van Gorden 134' "All Bander" antenna. Nice landlord, eh?

With the All Bander in place and after several weeks of comparing performance
of it with the old antenna, I took down the old antenna and wrapped it up and
threw it in the closet. Now, I'm running a FT-857D and a LDG Z-100 tuner.

I thought I'd like to build a 6 meter SSB/CW inverted V dipole out of the leftovers from the old antenna/coil/coax setup in the closet. No sweat but I am
concerned if that a 2-3/4 inch, 9 turn choke would be ok on 50-51 mhz at 50w?

I'm too impatient to wait so I'm gonna start building now but I 'd very much like to hear your opinions - I can always make changes and even build more coax assemblies with coils wound on one end with different turn diameters and more or less turns as I have several coax assemblies in the closet that are'nt
getting used right now.

Anyone have an opinion for # of turns and what diameter would be best for
50w @ 50-51 mhz SSB/CW? BTW the antenna will be taped to a large
window on the 3rd floor, facing east & about 3-4' from my PC and radio gear.

73's de Ken KG0WX, Denver Area, Colorado.

133. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 16:16:25 UTC
From: n7hjremove@yahoo.com
Message-ID: <40e82d15.8793765@news.verizon.net>
Source record: 92704

On Sat, 03 Jul 2004 17:42:05 -0700, cva <bn@art.com> wrote:

>R. Scott wrote:
>
>>Gawd I hate it when Jr High lets out and mommy and daddy dont look
>>to see what the brat is up to on the computer
>>
>>
>>
>Gawd I hate it when ignorant bush loving trash can't pull their head out.

Except 1 thing Bozo, I dont care for bush or kerry or politicians in general.

But I hate Teeny Boppers who think Swearing on a Newsgroup and
posting crap that doesnt belong there is cool even more.

134. Re: wierd wire on my hands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 16:35:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e832b5_3@corp.newsgroups.com>
Source record: 92705

The Eternal Squire wrote:
> It is basically a dipole whose endpoints are 15 degrees apart rather
> than 180.

> Any suggestions for improving this situation?

An inverted-L would probably work a lot better than that 15
degree spacing.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

135. Re: Building a 51 mhz inverted V - feedpoint question....Help!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 17:24:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9lege0dmvlcf6eb0bob48vro3go3pqp3aq@4ax.com>
Source record: 92706

On Sun, 4 Jul 2004 10:14:58 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:
>Anyone have an opinion for # of turns and what diameter would be best for
>50w @ 50-51 mhz SSB/CW? BTW the antenna will be taped to a large
>window on the 3rd floor, facing east & about 3-4' from my PC and radio gear.

Hi Ken,

Simply think proportionality. What worked best at which band? Scale
by band. The choke is principally designed as an inductor. More Z,
better. However, as with anything in nature, there are capacitances
that come into play. For these chokes they aid in the sense of
offering a resonance that further increases Z. However, such
capacitances, at some frequencies, become series resonant
opportunities and the game is gone.

The standard advice for 6 to 8 turns of 6 to 8 inch diameter work well
for mid-to-upper-HF, smaller is indicated by the rule of proportions,
but not very much smaller. Using ferrites offers a more controlled
approach and becomes a matter of selecting the right material, visit:
http://bytemark.com/products/content0.htm
specifically (for discussion of materials and properties):
http://bytemark.com/products/content2.htm

73's
Richard Clark, KB7QHC

136. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 17:25:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v9fge059ihi0csmj29rbq7r2uhnevskv38@4ax.com>
Source record: 92707

On Sun, 04 Jul 2004 16:16:25 GMT, n7hjremove@yahoo.com (R. Scott)
wrote:

>But I hate Teeny Boppers who think Swearing on a Newsgroup

He is in his mid-40's (which hardly lightens the charge)

137. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 17:47:30 UTC
From: cva <bn@art.com>
Message-ID: <cc9fsf11dhd@enews1.newsguy.com>
Source record: 92708

Bill Turner wrote:

>On Sat, 03 Jul 2004 17:45:08 -0700, cva <bn@art.com> wrote:
>
>
>
>>The government isn't going to 'give' you anything. But you should expect
>>something back from the federal taxes that are taken from you. I'm mean
>>something other than a scam war that has murdered 850 american soldiers.
>>War crime trials for Bush not Hussein!!!!!
>>
>>
>
>_____
>
>Osama finally got a computer.
>
>
>
Osama is a better human being than George Bush.

138. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 17:50:11 UTC
From: cva <bn@art.com>
Message-ID: <cc9g1g21dhd@enews1.newsguy.com>
Source record: 92709

R. Scott wrote:

>On Sat, 03 Jul 2004 17:42:05 -0700, cva <bn@art.com> wrote:
>
>
>
>>R. Scott wrote:
>>
>>
>>
>>>Gawd I hate it when Jr High lets out and mommy and daddy dont look
>>>to see what the brat is up to on the computer
>>>
>>>
>>>
>>>
>>>
>>Gawd I hate it when ignorant bush loving trash can't pull their head out.
>>
>>
>
>Except 1 thing Bozo, I dont care for bush or kerry or politicians in general.
>
>But I hate Teeny Boppers who think Swearing on a Newsgroup and
>posting crap that doesnt belong there is cool even more.
>
>
>
And we don't care for you dirtbag. As for postingcrap on a NG, why do
you do it.

139. Re: 2 meter & GPS antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 19:00:26 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <etYFc.7440$JR4.7037@attbi_s54>
Source record: 92710

"Gary S." <Idontwantspam@net> wrote in message
news:rvfee0h99od1njg510kh5v8utp3f01m1f8@4ax.com...
> On Sat, 03 Jul 2004 20:53:32 GMT, "G.Beat"
> <now9spamgb@no.comcast.spam.net> wrote:
>
>>You should investigate the usage of a mobile antenna, such as the GPSx
>>Survivor by Antenex, 2000-205 Bloomingdale Road Glendale Heights,
>>Illinois
>>60139
>>http://www.antenex.com/
>>
>>GPSx Survivor - Model GPSDVHF
>>It comes complete with 14 feet of RG174 terminated with an SMB connector
>>for
>>GPS and 14 feet RG58A/U terminated with N connector. It is mounted through
>>a
>>5/8" diameter mounting hole and secured with an included heavy stainless
>>steel jam nut.
>>
> Sounds like a good solution.
>
> However, I would not call that a dual band antenna, but two different
> antennas mounted in the same package.
>
> How is the active GPS antenna powered?

Gary -

Correct, this is 2 antenna is one mounting - which is important for some mobile installations (e.g. public safety and utility vehicles) AND since the desired characteristics of each antenna are entirely different.

For GPS at 1.5 GHz -- the antenna pattern needs to see the entire sky. Why? GPS receivers require a minimum of 4 satellites in view to perform a position lock - and the constellation of GPS satellites are always moving (orbit) in you visible sky. Look at any new car (e.g. 2004 Honda Accord with Navigation option) - you will see the GPS antenna housing at the center of the hood back - for maximum sky visibility.

For 2 meter mobile - the desired antenna pattern is toward the horizon. This is why 5/8 wave antennas are popular - since their pattern at the horizon is superior to almost all other antenna types (e.g. 19" 1/4 wave or 38" 1/2 wave antennas).

Power to the antenna is an excellent question. There are 2 types of GPS antennas - passive and active.

"Passive" GPS antennas (also called substrates) do not include a Low Noise Amplifier (LNA) and are best suited to GPS applications requiring a short distance, 1 inch to 3 feet, between the GPS receiver and antenna. Passive antennas require an LNA on the GPS receiver (such as the GT+ "R4" part number series) or mounting a separate LNA close to the RF input connector of a receiver that does not include an on-board LNA (such as the GT+ "R3" series and the M12).

"Active" GPS antennas include a built-in Low Noise Amplifier (LNA) which provides sufficient gain to overcome coax cable losses while providing the proper signal level to the GPS receiver. This LNA requires power from the GPS receiver to operate -- the GPS receiver antenna connector (just like the older style UHF TV pre-amps from the 1970s).
The GPS voltage standard use to be 5 volts -- BUT this was recently been changed to 3.3. volt by most manufacturers.

In order to prevent damage to the GPS receiver or antenna -- YOU MUST MATCH the GPS receiver and antenna.
Some antenna manufacturers can handle both voltages - BUT NOT ALL.

The company that I obtain my GPS supplies form is Synergy Systems, LLC in San Diego. They are the largest distributor of Motorola GPS receivers - and have been a supported of TAPR, Amateur Radio APRS usage as well as educational experimenters (GPS for Scholars program).
http://www.synergy-gps.com/

I always check their excess inventory sale for inexpensive GPS items (Acrobat PDF)
The Oncore units are OEM boards and require a TAC-2 or equivalent interface board for operation
http://www.synergy-gps.com/Excess_Inventory.pdf

Greg, w9gb

140. Re: Salt Water Canal antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 19:32:13 UTC
From: Bob_W <robertw.nospam@zianet.com>
Message-ID: <llmge096m5rpcp14f1irh059kbvlafcnta@4ax.com>
Source record: 92711

Maybe a vertical antenna?? At least you should have a good ground
there. Here in the high desert, "ground" is something sometimes as
hard to find as a tree for antenna support.

On Sun, 4 Jul 2004 09:40:50 -0400, "Steve Brenner"
<steevo40@yahoo.com> wrote:

>Hi All,
>
>I will be moving into a house with a salt water canal in the backyard.
>The lot is about 100 feet wide on the canal with nothing but ceramic tile
>surrounding a pool...NO open Ground just a few palm trees surrounded small
>squares of mulch.....
>I am looking for any ideas for an antenna....to cover 80-10 .....
>
>Anybody have experience with salt water near by???
>
>Thanks
>
>Steve
>KB8IPZ
>

141. Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 19:37:54 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <m0ZFc.12837$z81.1499@fed1read01>
Source record: 92712

For Field Day we homebrewed a 32 foot vertical out of five swimming pool poles. Secured to a six foot tripod with spikes in each tripod leg.

The radiator was a 32 foot length of zip cord.

Four radials (zip cord) were used at about the 10 foot level drooping down.

SWR was 1:1.5 to one across the 40 M band

Used it on 15M as well with SWR less than 2.5 to one.

Antenna worked well across country on both bands. West coast to east coast.

Next year I would like to refine it by replacing the swimming pool poles with aluminum tubing (6 foot sections) where each section fits into the previous one. Figure I will need 6 sections to allow for 4 inches inserts. Then hose clamp them. May have to double up and use double wall tubing.

Trying to figure what diameter to start with at the bottom. Greatly prefer NOT to use guy wires.

Another problem is insulating the 32 foot radiator from the tripod. Maybe a 5 foot section of plastic pipe PVC ???

Maybe I am better off to use the swimming poles as they didn't fall down for 24 hours (;-)

Ideas appreciated

--
Lamont Cranston

The Shadow Knows

142. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 19:48:17 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <6aZFc.12842$z81.1937@fed1read01>
Source record: 92713

Also want to raise the antenna Iwo Jima Style -- i.e., no raising fixtures
just horse it up from ground to the vertical with 3 or 4 helpers.
--
Lamont Cranston

The Shadow Knows
"Da Shadow" <DAS@cat.net> wrote in message
news:m0ZFc.12837$z81.1499@fed1read01...
> For Field Day we homebrewed a 32 foot vertical out of five swimming pool
> poles. Secured to a six foot tripod with spikes in each tripod leg.
>
> The radiator was a 32 foot length of zip cord.
>
> Four radials (zip cord) were used at about the 10 foot level drooping
down.
>
> SWR was 1:1.5 to one across the 40 M band
>
> Used it on 15M as well with SWR less than 2.5 to one.
>
> Antenna worked well across country on both bands. West coast to east
coast.
>
> Next year I would like to refine it by replacing the swimming pool poles
> with aluminum tubing (6 foot sections) where each section fits into the
> previous one. Figure I will need 6 sections to allow for 4 inches inserts.
> Then hose clamp them. May have to double up and use double wall tubing.
>
> Trying to figure what diameter to start with at the bottom. Greatly prefer
> NOT to use guy wires.
>
> Another problem is insulating the 32 foot radiator from the tripod. Maybe
a
> 5 foot section of plastic pipe PVC ???
>
> Maybe I am better off to use the swimming poles as they didn't fall down
for
> 24 hours (;-)
>
> Ideas appreciated
>
> --
> Lamont Cranston
>

> The Shadow Knows
>
>

143. Re: Who has an ideal horizontal dipole for HF?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 20:17:41 UTC
From: mxduffie@axtxom.net
Message-ID: <bepge05i3eqn7mdg41vik22vcn5igsah6l@4ax.com>
Source record: 92714

On Sun, 16 May 2004 21:15:29 GMT, R. David Steele
<steele.david@verizon.net/OMEGA> wrote:

> I gather that while they are very broad
> banded, they have less the best gain?

Yes, resistors have good bandwidth but less gain. ;o)

g1
--
Replace x in adr with c

144. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 20:53:18 UTC
From: jgboyles@aol.com
Message-ID: <20040704165318.04282.00000758@mb-m26.aol.com>
Source record: 92715

>For Field Day we homebrewed a 32 foot vertical out of five swimming pool
>poles. Secured to a six foot tripod with spikes in each tripod leg.

I have used a vertical supported by a 33' fiberglass push up pole. (Kanga and
MFJ among others sell these, about $90) The radiator was #14 stranded wire.
Required no guys, clamped the bottom to a 4' wooden fence with a couple of
conduit clamps. One year I used my deck railing and conduit clamps.
This vertical can easily be raised and lowered by 1 person. I have also used
this as the support for an 80-10m inv. vee, and two of them for 80-10m dipole.
It took one person (me) 20 minutes to get the 80-10m dipole in the air.
I know this didn't exactly answer the question you asked, but it might give
you some options.
73 Gary N4AST

145. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 20:59:09 UTC
From: dplatt@radagast.org
Message-ID: <10egrstamkh4r42@corp.supernews.com>
Source record: 92716

>Next year I would like to refine it by replacing the swimming pool poles
>with aluminum tubing (6 foot sections) where each section fits into the
>previous one. Figure I will need 6 sections to allow for 4 inches inserts.
>Then hose clamp them. May have to double up and use double wall tubing.

Another alternative: I've been told that it's easy to purchase
sections of aluminum tubing with built-in snap-together fittings.
They're sold in the concrete/cement portion of building-supply stores,
and are used to create the long handles for concrete "floating"
(smoothing) tools.

I picked up a half-dozen poles like this at a local surplus-metals
dealer. They'd make a very decent mast, and probably a decent
vertical (although I'm not sure just how reliable an electrical
contact exists between adjacent sections when they're snapped
together). They're 1" in diameter and have an overlap area of about
2".

>Trying to figure what diameter to start with at the bottom. Greatly prefer
>NOT to use guy wires.

I'd encourage you to always use at least one set of guys on an
impromptu vertical of this size. It really wouldn't take all that
much wind force at the top to render your tripod unstable... and
having a 32-foot aluminum pole come down on somebody's head would
really spoil your Field Day.

>Another problem is insulating the 32 foot radiator from the tripod. Maybe a
>5 foot section of plastic pipe PVC ???

Sure, that'd work. PVC cap on the bottom, notch out a spot a couple
of inches above the bottom to run a cable-and-clamp through, and you'd
be good to go.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

146. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 21:49:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e87c4b$1_3@corp.newsgroups.com>
Source record: 92717

cva wrote:
> Osama is a better human being than George Bush.

By what objective standard?

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

147. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 21:54:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e87d7c$1_3@corp.newsgroups.com>
Source record: 92718

Da Shadow wrote:
> Trying to figure what diameter to start with at the bottom. Greatly prefer
> NOT to use guy wires.

Check with Texas Towers (http://www.texastowers.com). They have a program
for computing such. You will be surprised at the large diameter necessary
to avoid guy wires. It wasn't worth it for me. It's super easy to guy using
black dacron string/rope.

> Another problem is insulating the 32 foot radiator from the tripod. Maybe a
> 5 foot section of plastic pipe PVC ???

I wrapped the bottom aluminum tubing section in PVC pipe and U-bolted it
to a 2x4. Perhaps something like that would work for you.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

148. Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 22:08:03 UTC
From: Jeff <jeff_164@hotmail.com>
Message-ID: <8d%Fc.7124$LT3.277012@news.xtra.co.nz>
Source record: 92719
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

Hi,
Does anyone remember a weird compact antenna that was featured in a 60's (or early 70's) edition of "73" magazine. Had 2 etched PCBs (like spaced plates) mounted inside a plastic bucket, and fed with coax?
Does anyone know more details of this?
JEFF
ZL3TNV

149. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 22:25:32 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <40e886b9_4@news1.prserv.net>
Source record: 92720

Shakespeare makes exactly what you want, but you can't afford it. It is
self supporting up to 15 knot wind, the nylon guys are necessary above that.
Shakespeare calls it a "Style 120-60", Military nomenclature is AT1011/U.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Da Shadow" <DAS@cat.net> wrote in message
news:m0ZFc.12837$z81.1499@fed1read01...
> For Field Day we homebrewed a 32 foot vertical out of five swimming pool
> poles. Secured to a six foot tripod with spikes in each tripod leg.
>
> The radiator was a 32 foot length of zip cord.
>
> Four radials (zip cord) were used at about the 10 foot level drooping
down.
>
> SWR was 1:1.5 to one across the 40 M band
>
> Used it on 15M as well with SWR less than 2.5 to one.
>
> Antenna worked well across country on both bands. West coast to east
coast.
>
> Next year I would like to refine it by replacing the swimming pool poles
> with aluminum tubing (6 foot sections) where each section fits into the
> previous one. Figure I will need 6 sections to allow for 4 inches inserts.
> Then hose clamp them. May have to double up and use double wall tubing.
>
> Trying to figure what diameter to start with at the bottom. Greatly prefer
> NOT to use guy wires.
>
> Another problem is insulating the 32 foot radiator from the tripod. Maybe
a
> 5 foot section of plastic pipe PVC ???
>
> Maybe I am better off to use the swimming poles as they didn't fall down
for
> 24 hours (;-)
>
> Ideas appreciated
>
> --
> Lamont Cranston

>
> The Shadow Knows
>
>

150. 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 23:30:08 UTC
From: chris@amos.yipyap.com
Message-ID: <slrnceh4o0.kr0.chris@amos.yipyap.com>
Source record: 92571

I just purchased a dualband vhf/uhf radio
but I don't have any dualband antennas.

I would like to know if there are any
on-line plans for dual band antennas
that I can build _without_ benefit
of a antenna analyzer or 70cm swr
bridge. This would be for mounting
at home, not mobile or portable.
And I prefer something omnidirectional.

I have some aluminum stock lying around.
Any ideas?

151. Re: 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-04 23:40:21 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <6u4he0l9ab7c0ms3rogdts0q5foinfspeq@4ax.com>
Source record: 92572

On 04 Jul 2004 23:30:08 GMT, chris@amos.yipyap.com (Chris Howard)
wrote:

>
>I just purchased a dualband vhf/uhf radio
>but I don't have any dualband antennas.
>
>I would like to know if there are any
>on-line plans for dual band antennas
>that I can build _without_ benefit
>of a antenna analyzer or 70cm swr
>bridge. This would be for mounting
>at home, not mobile or portable.
>And I prefer something omnidirectional.
>
>I have some aluminum stock lying around.
>Any ideas?

My homebrew 2-meter j-pole (made from 450-ohm ladderline) is also
resonant on its 3rd harmonic, 70cm, and has reasonably low swr on both
bands.

Just do a net search for 2-meter j-poles. Easy to make. And you'll
have a dual bander.

Bob
k5qwg

>
>
>
>
>

152. Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 00:21:11 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040704202111.05916.00001207@mb-m05.aol.com>
Source record: 92573

Howdy radio aficionados,

On this July 4th we are pleased to reveal the packaging and engineering prototype of Computeradio "Dream Radio One". It features stainless steel cabinet which will fit in the carry-on luggage, color LCD display, ergonomically designed controls (large tuning knob, key/paddles, foot switches yet to come) with two top notch ham band receivers, transmitter, spectrum analyzer/recorder with general coverage receiver in modular packaging with user programmable software.
You can peek at the picture of the system at http://www.computeradio.us/

Happy Independence Day and let the Freedom Ring!

Yuri, K3BU.us

153. Re: 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 00:22:11 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <Ta1Gc.12863$z81.2269@fed1read01>
Source record: 92574

See URL:
http://www.n7qvc.com/amateur_radio/copper.html

AND
http://ac6v.com/antprojects.htm

--
Lamont Cranston

The Shadow Knows
"Chris Howard" <chris@amos.yipyap.com> wrote in message
news:slrnceh4o0.kr0.chris@amos.yipyap.com...
>
> I just purchased a dualband vhf/uhf radio
> but I don't have any dualband antennas.
>
> I would like to know if there are any
> on-line plans for dual band antennas
> that I can build _without_ benefit
> of a antenna analyzer or 70cm swr
> bridge. This would be for mounting
> at home, not mobile or portable.
> And I prefer something omnidirectional.
>
> I have some aluminum stock lying around.
> Any ideas?
>
>
>
>
>
>

154. Re: 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 00:34:11 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <7m1Gc.1831$0Q1.429@fe1.columbus.rr.com>
Source record: 92575

Try this link: http://www.arrowantennas.com/inst/ijpole.html
Darn easy antenna to build and a real good match on both bands.
73
Richard WB8KRN

"Chris Howard" <chris@amos.yipyap.com> wrote in message
news:slrnceh4o0.kr0.chris@amos.yipyap.com...
>
> I just purchased a dualband vhf/uhf radio
> but I don't have any dualband antennas.
>
> I would like to know if there are any
> on-line plans for dual band antennas
> that I can build _without_ benefit
> of a antenna analyzer or 70cm swr
> bridge. This would be for mounting
> at home, not mobile or portable.
> And I prefer something omnidirectional.
>
> I have some aluminum stock lying around.
> Any ideas?
>
>
>
>
>
>

155. Re: 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 01:05:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e8aa64_6@corp.newsgroups.com>
Source record: 92576

Bob Miller wrote:
> My homebrew 2-meter j-pole (made from 450-ohm ladderline) is also
> resonant on its 3rd harmonic, 70cm, and has reasonably low swr on both
> bands.

Third harmonic UHF verticals are not a good idea. The take-off-angle
is about 47 degrees so most of the RF is lost. Yes, they work after
a fashion, but not nearly as well as a 1/4WL vertical.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

156. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 01:11:43 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <jV1Gc.24086$%_6.2422@attbi_s01>
Source record: 92577

You can buy mast sections on E BAY made of either aluminum or fibre glass
(which can interconnect) upon which you can stick on aluminum(sticky back)
tape. They come in about 50 " lengths and slide into each other. You can
also buy a tripod connection into which you can place fibre glass sections.
Diameter of mast is about 2" From memory a 50 foot pole was less than $50.
You could also add telescopic Roach (crappie) fishing poles which are 20'-0"
long which are also on E Bay at about $30 for two. There are lots of
inexpensive ways to make antennas for field day and hikers.
Have fun
Art

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:40e886b9_4@news1.prserv.net...
> Shakespeare makes exactly what you want, but you can't afford it. It is
> self supporting up to 15 knot wind, the nylon guys are necessary above
that.
> Shakespeare calls it a "Style 120-60", Military nomenclature is AT1011/U.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
> "Da Shadow" <DAS@cat.net> wrote in message
> news:m0ZFc.12837$z81.1499@fed1read01...
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> > The radiator was a 32 foot length of zip cord.
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> down.
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> coast.
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> > Next year I would like to refine it by replacing the swimming pool poles
> > with aluminum tubing (6 foot sections) where each section fits into the
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> > Then hose clamp them. May have to double up and use double wall tubing.
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> > Trying to figure what diameter to start with at the bottom. Greatly
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> > NOT to use guy wires.
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> a
> > 5 foot section of plastic pipe PVC ???
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> for
> > 24 hours (;-)
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> > Ideas appreciated
> >
> > --
> > Lamont Cranston
> >
> > The Shadow Knows
> >
> >
>
>

157. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 01:39:47 UTC
From: JohnJacobJingleHimerSchmidt <camp_carzy@att.worldnet.com>
Message-ID: <40E8B162.4050404@att.worldnet.com>
Source record: 92578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

Was it in the April issue? A lot of "fools" fell for such articles in
73 Magazine, Hi.
One such antenna was to be buried under ground then the "polarity" of
the radiated
wave would be "inverted". ;-)

There are a few who experiment with "EH" antennas, where a coil is
placed in coffee cans,
spaced at different intervals for the band the antenna is to be used.
http://www.qsl.net/w0kph/can.html

JJJHS

Jeff wrote:

>Hi,
>Does anyone remember a weird compact antenna that was featured in a 60's (or
>early 70's) edition of "73" magazine. Had 2 etched PCBs (like spaced plates)
>mounted inside a plastic bucket, and fed with coax?
>Does anyone know more details of this?
>JEFF
>ZL3TNV
>
>
>
>

158. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 01:40:26 UTC
From: JohnJacobJingleHimerSchmidt <camp_carzy@att.worldnet.com>
Message-ID: <dk2Gc.25668$Oq2.25030@attbi_s52>
Source record: 92579
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

Was it in the April issue? A lot of "fools" fell for such articles in
73 Magazine, Hi.
One such antenna was to be buried under ground then the "polarity" of
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wave would be "inverted". ;-)

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>Does anyone know more details of this?
>JEFF
>ZL3TNV
>
>
>
>

159. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 01:59:42 UTC
From: k9sqg@aol.com
Message-ID: <20040704215942.15941.00000706@mb-m21.aol.com>
Source record: 92580

High voltage hotsticks can be made self supporting.

160. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 03:17:48 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <bfhhe05n8k2ln4r101t1b6c39dc3mbfhnf@4ax.com>
Source record: 92581

On 05 Jul 2004 00:21:11 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich) wrote:

>Howdy radio aficionados,
>
>On this July 4th we are pleased to reveal the packaging and engineering
>prototype of Computeradio "Dream Radio One". It features stainless steel
>cabinet which will fit in the carry-on luggage, color LCD display,
>ergonomically designed controls (large tuning knob, key/paddles, foot switches
>yet to come) with two top notch ham band receivers, transmitter, spectrum
>analyzer/recorder with general coverage receiver in modular packaging with user
>programmable software.
>You can peek at the picture of the system at http://www.computeradio.us/
>
>Happy Independence Day and let the Freedom Ring!
>
>Yuri, K3BU.us

Congratulations, Yuri! Your DR1 looks great! It;s been evident from the expertise displayed in your posts that you are a very knowledgeable guy, but this revelation is icing on the cake--talk about surprise!.

I noticed that you moved from Canada to New Jersey in 1986. I lived in central Jersey, in Dayton near Princeton, for 31 years while with RCA, but I hadn't heard of Pine Brook. Is it near Edison? I have been in Edison many times, including visiting the Edison Museum during the 1950's.

I wish you the best with your new project, Yuri,

Walt, W 2DU

161. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 03:47:45 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <zb4Gc.1746$%w5.66@okepread05>
Source record: 92582
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

"Jeff" <jeff_164@hotmail.com> wrote in message
news:8d%Fc.7124$LT3.277012@news.xtra.co.nz...

>>> Does anyone remember a weird compact antenna that was featured in a
60's<<<

I recall one in a publication (S9) aimed at CB'ers back in the 60's. It used
printed circuit boards as you mentioned but also incorporated a nice husky
resistor that turned the critter into a dummy load. The article didn't fess
up that it was an April fool joke until the next issue. Wonder how many fell
for it? RM~

162. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 03:54:47 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <9i4Gc.1747$%w5.1570@okepread05>
Source record: 92583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

"Groom Lake" <chupacabra@operamail.com> wrote in message
news:40e9cf82.1579216@chupacabra...
> In Message-ID:<8d%Fc.7124$LT3.277012@news.xtra.co.nz> posted on Mon, 5

>> I believe it might have been one of Kneitel's humor pieces.<<

Your memory is better than mine on the details but you've got it. If I
recall their were a lot of disgruntled readers. RM~

163. Re: 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 06:05:48 UTC
From: "Mike M." <notme@invalid.email.net>
Message-ID: <horhe0huqcbm6pugd3dilniusdoaa2d78k@4ax.com>
Source record: 92584

On Mon, 05 Jul 2004 00:34:11 GMT, "Richard Heindel"
<rheindel@neo.rr.com> wrotF:

>Try this link: http://www.arrowantennas.com/inst/ijpole.html
>Darn easy antenna to build and a real good match on both bands.
>73
>Richard WB8KRN
I'll second that. I built a copy of the Arrow antenna from the Arrow
plans and it has low SWR on both bands and works okay too.

Not too expensive to buy either if you have more money than time.

Mike kc9doa

164. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 06:15:08 UTC
From: Rob Mills <robmills@cox.net>
Message-ID: <Kl6Gc.1758$%w5.429@okepread05>
Source record: 92585
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

"Groom Lake" <chupacabra@operamail.com> wrote in message
news:40e9e5f1.7323874@chupacabra...
> In Message-ID:<9i4Gc.1747$%w5.1570@okepread05> posted on Sun, 4 Jul 2004

>>>Latter when the Browning labs introducedtheir "Eagle" series, I often wondered why the TR switch they used was configured to produce that feedback ping,<<<

Ok, I'll fess up; I had the eagles but mine refused to ping after I built a Wayne Green circuit (I think he nick named it the "Mule Box") which was a clamp tube circuit that ran the Brownies double sideband reduced carrier. It drove the locals nuts watching their s meters going nuts. I wasn't much into gab but enjoyed tinkering with the equipment more than gabbing on them so soon sold out except for a CB I used in the truck. I drove an 18 for a living and retired in 84 and haven't keyed anything since. RM~

165. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 08:26:17 UTC
From: rhf-newsgroups@pacbell.net
Message-ID: <ff3145e8.0407050026.5f9c278d@posting.google.com>
Source record: 92586
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

JJJHS,

"EH Antennas" eGroup on YAHOO !
http://groups.yahoo.com/group/eh-antenna/

"EH Antenna Users" eGroup on YAHOO !
http://groups.yahoo.com/group/eh_antenna_users/

"E-H Antenna Builders & Users" eGroup on YAHOO !
http://groups.yahoo.com/group/ehantennausers/

"WTAL Fans" eGroup on YAHOO !
http://groups.yahoo.com/group/WTALfans/
The EH antenna has exceptional promise. It is about 10' in
diameter, requires no extensive underground radials, uses
approximately 75% less energy and is more efficient.

WebSite with Tools and Tips to Assist "EH" Antenna Design & Building
http://www.eh-antenna.com/EH_Antenna_Tools_and_Tips.htm
http://www.geocities.com/ke0vh/eh
http://www.qsl.net/vk5br/EHAntennaTheory.htm
http://www.eh-antenna.se/

That's My Name Too ~ RHF
LYRICS=> http://www.walkthroughlife.com/midis/kidsmidis/jjjhschmidt.htm
MUSIC=> http://www.walkthroughlife.com/midis/kidsmidis/jjjhs.mid
SONGS=> http://www.walkthroughlife.com/midis/kidsmidis/
http://www.backyardgardener.com/loowit/song/song48.html
http://www.backyardgardener.com/loowit/janeellen.html
http://www.scoutsongs.com/lyrics/johnjacob.html
NIH=> http://www.niehs.nih.gov/kids/lyrics/john.htm
NIEHS-INDEX=> http://www.niehs.nih.gov/kids/music.htm#index
.
.
= = = JohnJacobJingleHimerSchmidt <camp_carzy@att.worldnet.com> wrote in message
news:<40E8B162.4050404@att.worldnet.com>...
> Was it in the April issue? A lot of "fools" fell for such articles in
> 73 Magazine, Hi.
> One such antenna was to be buried under ground then the "polarity" of
> the radiated
> wave would be "inverted". ;-)
>
> There are a few who experiment with "EH" antennas, where a coil is
> placed in coffee cans,
> spaced at different intervals for the band the antenna is to be used.

> http://www.qsl.net/w0kph/can.html
>
> JJJHS
>
> Jeff wrote:
>
> >Hi,
> >Does anyone remember a weird compact antenna that was featured in a 60's (or
> >early 70's) edition of "73" magazine. Had 2 etched PCBs (like spaced plates)
> >mounted inside a plastic bucket, and fed with coax?
> >Does anyone know more details of this?
> >JEFF
> >ZL3TNV
>
.

166. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 08:31:53 UTC
From: rhf-newsgroups@pacbell.net
Message-ID: <ff3145e8.0407050031.b7e3d7a@posting.google.com>
Source record: 92587
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

= = = "Jeff" <jeff_164@hotmail.com> wrote in message
= = = news:<8d%Fc.7124$LT3.277012@news.xtra.co.nz>...
> Hi,
> Does anyone remember a weird compact antenna that was featured in a 60's (or
> early 70's) edition of "73" magazine. Had 2 etched PCBs (like spaced plates)
> mounted inside a plastic bucket, and fed with coax?
> Does anyone know more details of this?
> JEFF
> ZL3TNV
.

JEFF [ZL3TNV]

You may wish to try posting this same question 'separately'
on the: "Rec.Radio.Amateur.Antenna" NewsGroup.

RRAA=> http://tinyurl.com/2hlw7
<http://groups.google.com/groups?hl=en&lr=&ie=UTF-8&group=rec.radio.amateur.antenna>

hth ~ RHF

.

167. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 10:44:24 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <eiaGc.10174$151.4261@fed1read02>
Source record: 92588

"Bill Turner" <noway@nohow.com> wrote in message
news:7a6he0dv8dj6vr3it1tcd7so8bgffenc3o@4ax.com...
> On Sun, 04 Jul 2004 16:49:20 -0500, Cecil Moore <w5dxp@hotmail.com>
> wrote:
>
> >cva wrote:
> >> Osama is a better human being than George Bush.
> >
> >By what objective standard?
>
> --
>
> Cecil, do you know what happens when you rassle with pigs? :-)
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

I don't know much about rasslin' pigs, but I do know how to make bacon!

Ed
wb6wsn
Proud to be an infidel

168. Re: QUESTION & REQ: Real Audio Radio Recorder with Schedule/Timer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 11:21:13 UTC
From: Kinsey 6 <kinsey6@somewhere.outthere.com>
Message-ID: <Xns951D4ACEE2A5Dkinsey6@65.32.1.8>
Source record: 92589

I have a PC with WindowsXP.

StrikitRich <strikitrich@nospam.excite.com> wrote in
news:strikitrich-A0F999.16484502072004@comcast.dca.giganews.com:

> In article <Xns951A46AAA5AB0kinsey6@65.32.1.7>,
> Kinsey 6 <kinsey6@somewhere.outthere.com> wrote:
>
>> Alright. I don't know what I'm looking for at all, so I figured I
>> would ask all of you. There is this streaming real audio radio show I
>> want to record. It is on weekdays from noon until 3pm, but I have no
>> idea what program I should get to record it on a schedule.
>>
>> Any guidance would be great. Thanks.
>>
>>
>>
>> Kinsey6
>
> What kind of computer do you have, PC or Mac?
>

169. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 12:03:22 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.05.12.03.22.29955@127.0.0.1>
Source record: 92590

On Sun, 04 Jul 2004 05:37:33 -0700, Ed Price wrote:

>
> "Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
> news:pan.2004.07.04.12.27.35.571961@127.0.0.1...
>> [quoted text muted]
>
>
> So, the locals around Phoenix work for free?
>
> Ed
> wb6wsn
huh?
who works for free?
and what does this have to do with finding a good condition used ringo 10
meter antenna?

I just don't have $105.28 (total cost after s&h are added) to get a new
one). if I can find one for $50.00 or less, I'd be happy with it.

DE N7ZZT
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

170. Re: 2m 70cm dual band homebrew?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 13:59:37 UTC
From: n7hjremove@yahoo.com
Message-ID: <40e95eab.1627734@news.verizon.net>
Source record: 92591

On Mon, 05 Jul 2004 06:05:48 GMT, Mike M. <notme@invalid.email.net> wrote:

>On Mon, 05 Jul 2004 00:34:11 GMT, "Richard Heindel"
><rheindel@neo.rr.com> wrotF:
>
>>Try this link: http://www.arrowantennas.com/inst/ijpole.html
>>Darn easy antenna to build and a real good match on both bands.
>>73
>>Richard WB8KRN
>I'll second that. I built a copy of the Arrow antenna from the Arrow
>plans and it has low SWR on both bands and works okay too.
>
>Not too expensive to buy either if you have more money than time.
>
>Mike kc9doa

Ill ditto that, I have one up on the roof right now. Its the best little antenna in the world and easy peasy to build.

Scotty N7HJ

171. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 14:18:23 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040705101823.19349.00001168@mb-m04.aol.com>
Source record: 92592

>
>Congratulations, Yuri! Your DR1 looks great! It;s been evident from the
>expertise displayed in your posts that you are a very knowledgeable guy, but
>this revelation is icing on the cake--talk about surprise!.
>
>I noticed that you moved from Canada to New Jersey in 1986. I lived in
>central
>Jersey, in Dayton near Princeton, for 31 years while with RCA, but I hadn't
>heard of Pine Brook. Is it near Edison? I have been in Edison many times,
>including visiting the Edison Museum during the 1950's.
>
>I wish you the best with your new project, Yuri,
>
>Walt, W 2DU

Hi Walt,
Thanks for kind words, coming especially from you. I enjoyed your Dayton presentation and been learning from the balun/matching wars here on the NG (I am trying to avoid them, keeping systems 50 ohms all the way :-)

I figured timing is right from my personal side and where the technology is and going. Ambitious project, but I always was intrigued by "impossible" tasks, have tackled few in my professional career, so I hope that this one will be "just another one."

Actually, I am debating if antenna tuner should be included, or in higher class of radio one should expect amplifier or tuned antennas to follow. It can always be an option, they are getting small (our expected output is 100W) and should fit inside.

The DR1 is my present to America and hams on 4th of July in thanks for accepting this BUm in search of freedom.

Pine Brook is in Montville township, area where Morse and Vail pioneered the telegraph stuff, next to Boonton (Instruments ex home), by intersections of Hwy 80 & 287, about 8 miles north of Morristown. There is still some of that spirit floating around here.

God Bless America!
73 and thanks again!

Yuri, K3BU.us
www.computeradio.us home of Dream Radio One

172. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 15:19:37 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <dkeGc.25935$MB3.18467@attbi_s04>
Source record: 92593

Bill Turner wrote:
> On Sun, 04 Jul 2004 16:49:20 -0500, Cecil Moore <w5dxp@hotmail.com>
> wrote:
>
>
>>cva wrote:
>>
>>>Osama is a better human being than George Bush.
>>
>>By what objective standard?
>
>
> ____
>
> Cecil, do you know what happens when you rassle with pigs? :-)

They squeal ... don't they?

173. What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 15:59:51 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <40e9787a.172663609@news.galilei.com>
Source record: 92594

Hi Gang

Last night was the 4th (doh, we all knew that!)

But how many of you woke up this morning with a rocket perched upside down on top of your tallest antenna?

I have a Diamond triband 2/220/440 antenna up some 60+ feet.
The remains of a finned rocket about 10 to 12 inches tall has managed to land on top of this antenna, nose down fins up. Right now it's at the very top, but I'm sure in a few days will probably slide down the antenna shaft coming into contact with the radials.

Should I worry about this (chemical reactions) or just forget it and let time and weather take it's toll on the remains?

TTUL - 73+ de Gary - KG ZP

174. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 16:10:04 UTC
From: fre <fre@mon.com>
Message-ID: <ccbua411nf9@enews3.newsguy.com>
Source record: 92596

Bill Turner wrote:

>On Sun, 04 Jul 2004 16:49:20 -0500, Cecil Moore <w5dxp@hotmail.com>
>wrote:
>
>
>
>>cva wrote:
>>
>>
>>>Osama is a better human being than George Bush.
>>>
>>>
>>By what objective standard?
>>
>>
>
>_____
>
>Cecil, do you know what happens when you rassle with pigs? :-)
>
>--
>Bill, W6WRT
>QSLs via LoTW
>
>
>
They start to smell like you.

175. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 16:10:49 UTC
From: fre <fre@mon.com>
Message-ID: <ccbubh21nf9@enews3.newsguy.com>
Source record: 92597

Ed Price wrote:

>"Bill Turner" <noway@nohow.com> wrote in message
>news:7a6he0dv8dj6vr3it1tcd7so8bgffenc3o@4ax.com...
>
>
>>On Sun, 04 Jul 2004 16:49:20 -0500, Cecil Moore <w5dxp@hotmail.com>
>>wrote:
>>
>>
>>
>>>>cva wrote:
>>>
>>>
>>>>>>Osama is a better human being than George Bush.
>>>>>
>>>>>
>>>By what objective standard?
>>>
>>>
>>____
>>
>>Cecil, do you know what happens when you rassle with pigs? :-)
>>
>>--
>>Bill, W6WRT
>>QSLs via LoTW
>>
>>
>>
>
>I don't know much about rasslin' pigs, but I do know how to make bacon!
>
>Ed
>wb6wsn
>Proud to be an infidel
>
>
>
You shouldn't do that to your fat porker wife.

176. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 16:12:22 UTC
From: fre <fre@mon.com>
Message-ID: <ccbuee31nf9@enews3.newsguy.com>
Source record: 92598

Cecil Moore wrote:

> cva wrote:
>
>> Osama is a better human being than George Bush.
>
>
> By what objective standard?
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

Bush has killed more innocent Iraqi's than bin laden has killed Americans.

177. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 16:19:22 UTC
From: "Peter O. Brackett" <none@no-such-domain.nul>
Message-ID: <ecfGc.2665$sD4.622@newsread3.news.atl.earthlink.net>
Source record: 92595

Hey Yuri:

Congratulations. Great start.

Outside of stainless steel looks great, and as we all know there's nothing like cold rolled steel for good emc control, ruggedization (smacks of MIL STD 810)and the steel could also be used for conduction cooling the PA to eliminate fan and fan noise.

Overall I believe the "dream package" needs a little "miniaturization".

Big flat color LCD screen is fine, big fat tuning knobs are great too, especially good for us old timers with dimming eyes and waning fine motor control. By now most have mastered the keyboard so I approve...

But... radio/cpu chassis could be smaller, with today's technology y'all should be able to fit everything but the power amp inside the keyboard.

Now that you've got the outside done, it's on to the tough part... the insides!

Most, but not all, of the innards can/should be "integrated" these days.

Plunk down a MIPS 64 core or two, run em with real time Open Source Linux to keep expense down, throw in a couple of SHARC DSP's, 24 bit ADC/DAs, and a couple of those big Xilinx FPGA's and there's nothing between you and success but software!

;-)

Good luck, I wish I had the time to help ya'll with the Dream, but I'm too busy now getting baby into the air...

Best wishes on The Fourth from another who has also adopted the USA as his own. Thank you USA for all the sacrifices you have made over the years to keep the world free!

--
Peter K1PO
Indialantic By-the-Sea, FL

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040704202111.05916.00001207@mb-m05.aol.com...
> Howdy radio aficionados,
>
> On this July 4th we are pleased to reveal the packaging and engineering
> prototype of Computeradio "Dream Radio One". It features stainless steel
> cabinet which will fit in the carry-on luggage, color LCD display,

> ergonomically designed controls (large tuning knob, key/paddles, foot
switches
> yet to come) with two top notch ham band receivers, transmitter, spectrum
> analyzer/recorder with general coverage receiver in modular packaging with
user
> programmable software.
> You can peek at the picture of the system at http://www.computeradio.us/
>
> Happy Independence Day and let the Freedom Ring!
>
> Yuri, K3BU.us
>

178. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 16:37:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6c0je0hlen1kb6264e68vrdko81ap5098o@4ax.com>
Source record: 92599
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

On 5 Jul 2004 01:26:17 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:

>The EH antenna has exceptional promise. It is about 10' in
>diameter, requires no extensive underground radials, uses
>approximately 75% less energy and is more efficient.

Hi OM,

More efficient that what, a resistor? 75% less energy than what, a
resistor?

The eh antenna is one of several of a class that take more effort for
less return than simply putting up as much wire as you have room for -
even if it is the same size as any of these "amazing!" antennas.

The absurd claims that attend the cfa/eh/fractal crowing societies is
matched by their inability to prove them except through their own
special math (never mind the S-Meter).

However, there are those who argue SWLers need poor antennas and I
suppose these fit the bill nicely. The technical equivalent of cell
phones VS string-and-dixie cups tho'.

73's
Richard Clark, KB7QHC

179. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 16:47:17 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncej1j0.2oh4.bit-bucket@walnut.config.com>
Source record: 92600

On Sun, 4 Jul 2004 12:37:54 -0700, Da Shadow hath writ:
> For Field Day we homebrewed a 32 foot vertical out of five swimming pool
> poles. Secured to a six foot tripod with spikes in each tripod leg.
>
<snip>
> Ideas appreciated

At the risk of giving away secret(s) that will require The
Gunnison Valley ARC to bust their butts even harder next year
to remain in the Top Ten of the 1A class, here's the 40M
vertical I built for us. At 2 A.M. it yields DX-style pile ups.
(Of course, "DX-style" pileups can be a curse -- they lower the
Q-rate.) Several times we have achieved 40M-WAS during FD.

It's a 2-element phased vertical made of ten-foot sections
of top-rail fence pipe. Each vertical, of course consists
of 3 sections to get to 30'. Then, a Big Hair Pin made from
10 ga. aluminium wire is pop-rivited to each top section to
Go The Extra Distance.

As best I can do in ASCII art, here's an astronaut's view of
the sucker:

```
. .
\ /
\ /
\ /
\ /
*-------------*
/ \
/ \
/ \
/ \
```

Of course, if you're not using a fixed-pitch font on usenet, then
this is a lot of gibberish....

All the guy wires are attached at the 20+ foot level --
just above the 2nd junction (i.e., at the *bottom* of the top
section). The center guy simply runs vertical-to-vertical.
In other words, there are only 4 ground attached guys.
It can be erected by three fellers in calm air (not recommended.)
Four fellers can throw it up easily.

You want to seek out the top rail fence pipe that has *DEEP*
slip fit joints. Ours are about 7".

I've already given away too much. HI!HI!
The phasing harness, the 1/4 wave matching section, the radials, and
controlling the directivity are left as An Exercise For The Student.

73 es gl,
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

180. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 17:01:49 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <LOfGc.1925$O14.1716@lakeread03>
Source record: 92601

"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:40e9787a.172663609@news.galilei.com...
> Hi Gang
>
> Last night was the 4th (doh, we all knew that!)
>
> But how many of you woke up this morning with a rocket perched upside
> down on top of your tallest antenna?
>
> I have a Diamond triband 2/220/440 antenna up some 60+ feet.
> The remains of a finned rocket about 10 to 12 inches tall has managed
> to land on top of this antenna, nose down fins up. Right now it's at
> the very top, but I'm sure in a few days will probably slide down the
> antenna shaft coming into contact with the radials.
>
> Should I worry about this (chemical reactions) or just forget it and
> let time and weather take it's toll on the remains?
>
> TTUL - 73+ de Gary - KGZP
>
>

Take a picture quick and send it to QST! They'd probably
publish it as a stray...

pete

181. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 17:17:31 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040705131731.11031.00001106@mb-m02.aol.com>
Source record: 92602

K1PO wirtes:
>
>Overall I believe the "dream package" needs a little "miniaturization".

>But... radio/cpu chassis could be smaller, with today's technology y'all
>should be able to fit everything but the power amp inside the keyboard.

Thanks for comments Peter. Geez, I tried to minimize the package, but this is about the smallest I could come up with, there is just enough space inside for the air to flow. It is a complete station, 2 (or more) ham band RXes, 1 (or more) TXes, GC RX, spectrum analyzer, display/recorder, 100 W PA with super filters, 6 antenna switching and RX protection, PS, antenna/rotor controls, rear panel PS exhaust and all the connectors plus, while keeping 6 PCI slots for max flexibility (VHF/UHF converters). DR1 replaces just about full desktop of existing boxes (FM and TV tuners incl.) and less than half the weight of regular TRX. Also trying to accomodate present and future variety of hardware, preserving modularity. All you need is to add the amplifier (carry-on PA1 coming after DR1) and hook your antennas.

The pocket version will be the next project :-)

73 Yuri, K3BU.us

182. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 17:39:33 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <jn3je01fq1nig23ocfkb12r1vqfvifm7ai@4ax.com>
Source record: 92603

On Mon, 5 Jul 2004 13:01:49 -0400, " Uncle Peter"
<radioconnectionNO@cox.netSPAM> wrote:

>
>"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
>news:40e9787a.172663609@news.galilei.com...
>> Hi Gang
>>
>> Last night was the 4th (doh, we all knew that!)
>>
>> But how many of you woke up this morning with a rocket perched upside
>> down on top of your tallest antenna?
>>
>> I have a Diamond triband 2/220/440 antenna up some 60+ feet.
>> The remains of a finned rocket about 10 to 12 inches tall has managed
>> to land on top of this antenna, nose down fins up. Right now it's at
>> the very top, but I'm sure in a few days will probably slide down the
>> antenna shaft coming into contact with the radials.
>>
>> Should I worry about this (chemical reactions) or just forget it and
>> let time and weather take it's toll on the remains?
>>
>> TTUL - 73+ de Gary - KGï¿½ZP
>>
>>
>
>Take a picture quick and send it to QST! They'd probably
>publish it as a stray...
>
>pete
>
The picture is a good idea, but please post it so we don't have to
wait for when/if it gets published! I wouldn't worry much about
chemical reaction, the propellant was probably expended though there
are likely trace amounts inside the tube (from the charge that pops
the parachute) and if the burned out engine is still inside the rocket
I doubt it will slide further down your antenna. It will take a while
for the weather to take care of this, so if it is affecting the
antenna's performance you've gotta make the climb ..... but not
before getting a good picture of it!

73 & good luck,
Howard

183. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 17:51:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40e99606$1_8@corp.newsgroups.com>
Source record: 92604

fre wrote:
> Bush has killed more innocent Iraqi's than bin laden has killed Americans.

Strange logic. For Hitler Vs Stalin, which was the good
guy and which was the bad guy?
--
73, Cecil, W5DXP

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

184. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 18:48:39 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <gj8je0t2iq0peno433qrue24t6ioi8i8bk@4ax.com>
Source record: 92605

On 05 Jul 2004 14:18:23 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich) wrote:

>>
>>Congratulations, Yuri! Your DR1 looks great! It;s been evident from the
>>expertise displayed in your posts that you are a very knowledgeable guy, but
>>this revelation is icing on the cake--talk about surprise!.
>>
>>I noticed that you moved from Canada to New Jersey in 1986. I lived in
>>central
>>Jersey, in Dayton near Princeton, for 31 years while with RCA, but I hadn't
>>heard of Pine Brook. Is it near Edison? I have been in Edison many times,
>>including visiting the Edison Museum during the 1950's.
>>
>>I wish you the best with your new project, Yuri,
>>
>>Walt, W 2DU
>
>
>Hi Walt,
>Thanks for kind words, coming especially from you. I enjoyed your Dayton
>presentation and been learning from the balun/matching wars here on the NG (I
>am trying to avoid them, keeping systems 50 ohms all the way :-)
>
>I figured timing is right from my personal side and where the technology is and
>going. Ambitious project, but I always was intrigued by "impossible" tasks,
>have tackled few in my professional career, so I hope that this one will be
>"just another one."
>
>Actually, I am debating if antenna tuner should be included, or in higher class
>of radio one should expect amplifier or tuned antennas to follow. It can always
>be an option, they are getting small (our expected output is 100W) and should
>fit inside.
>
>The DR1 is my present to America and hams on 4th of July in thanks for
>accepting this BUm in search of freedom.
>
>Pine Brook is in Montville township, area where Morse and Vail pioneered the
>telegraph stuff, next to Boonton (Instruments ex home), by intersections of Hwy
>80 & 287, about 8 miles north of Morristown. There is still some of that spirit
>floating around here.
>
>God Bless America!
>73 and thanks again!
>

>Yuri, K3BU.us
>www.computeradio.us home of Dream Radio One

185. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 19:16:50 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <uf9je0lk6q961ate4s87khsv9l4fggp9gr@4ax.com>
Source record: 92606

On Mon, 05 Jul 2004 18:48:39 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On 05 Jul 2004 14:18:23 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich) wrote:
>
>>>
>>>Congratulations, Yuri! Your DR1 looks great! It;s been evident from the
>>>expertise displayed in your posts that you are a very knowledgeable guy, but
>>>this revelation is icing on the cake--talk about surprise!.
>>>
>>>I noticed that you moved from Canada to New Jersey in 1986. I lived in
>>>central
>>>Jersey, in Dayton near Princeton, for 31 years while with RCA, but I hadn't
>>>heard of Pine Brook. Is it near Edison? I have been in Edison many times,
>>>including visiting the Edison Museum during the 1950's.
>>>
>>>I wish you the best with your new project, Yuri,
>>>
>>>Walt, W 2DU
>>
>>
>>Hi Walt,
>>Thanks for kind words, coming especially from you. I enjoyed your Dayton
>>presentation and been learning from the balun/matching wars here on the NG (I
>>am trying to avoid them, keeping systems 50 ohms all the way :-)
>>
>>I figured timing is right from my personal side and where the technology is and
>>going. Ambitious project, but I always was intrigued by "impossible" tasks,
>>have tackled few in my professional career, so I hope that this one will be
>>"just another one."
>>
>>Actually, I am debating if antenna tuner should be included, or in higher class
>>of radio one should expect amplifier or tuned antennas to follow. It can always
>>be an option, they are getting small (our expected output is 100W) and should
>>fit inside.
>>
>>The DR1 is my present to America and hams on 4th of July in thanks for
>>accepting this BUm in search of freedom.
>>
>>Pine Brook is in Montville township, area where Morse and Vail pioneered the
>>telegraph stuff, next to Boonton (Instruments ex home), by intersections of Hwy
>>80 & 287, about 8 miles north of Morristown. There is still some of that spirit
>>floating around here.
>>
>>God Bless America!

>>73 and thanks again!
>>
>>Yuri, K3BU.us
>>www.computeradio.us home of Dream Radio One

Hi Yuri,

I don't know what happened. I composed a long response msg to you, and as I was getting ready to send it the screen flipped to the next post below, the one from Peter. I'm using Agen, and it's not very user friendly. I've searched Agent as far as I can, but the msg is gone.

Trying to recap some of the original msg, I said I made a Dayton presentation in either 1983 or 84. My only time at Dayton since then was in 2001 to kick off the debut of Reflections 2, but I made no presentation then. Were you there in either 1983 or 84, or could you have mistaken me for someone else at a later time?

I lived in Dayton, NJ from 1949 to 1980, when I retired to DeLand, Florida. When ragchewing on the air people asked where Dayton is. So I told them I live about 800 mi east of Hamvention Town.

I now live 6 mo in DeLand and 6 mo in my home town of Mt. Pleasant Michigan, where I am now, a city of about 26,000 pop. There are more than a hundred hams here now, but from 1933 (when I first became licensed) until 1939, I was the only ham in the entire county.

I was telling you about two other items in the msg that got lost, but I can't remember what the were--par for the course at 85, but pretty good that I recalled the three items above, eh?

CUL, Walt

186. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 19:19:29 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <ZMKdnYMaU5RdNHTdRVn-vA@adelphia.com>
Source record: 92607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

Groom Lake wrote:

> In Message-ID:<Kl6Gc.1758$%w5.429@okepread05> posted on Mon, 5 Jul 2004
> 01:15:08 -0500, Rob Mills wrote:
>
>
>>I wasn't much into
>>gab but enjoyed tinkering with the equipment more than gabbing on them so
>>soon sold out except for a CB I used in the truck. I drove an 18 for a
>>living and retired in 84 and haven't keyed anything since. RM~
>
>
> Back in '66 I put one of those (pre-bucket brigade) delay boxes* with a
> spring and two transducers in line with my audio and some of the locals
> thought the echo was due to the enormous power level, similar to 15
> meter multipath, rather than just a precursor to today's echo-mike.
> *note - those delay boxes were more commonly used in conjunction with
> automotive 8-track players, and would make that distinctive boing effect
> whenever you hit a pothole or crossed the tracks too fast. ;-)

Well, since the topic is shifting, can anyone tell me what the echo is supposed to do? in my travels, with my CB on, I can "hear" people with echo mic's and I'll be darned if I can hear them well at all. Now echo AND way overmodulated, now there's the ticket to complete unintelligibility! (is that a word?)

- Mike -

187. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 19:33:01 UTC
From: Lou <FFSTA17NO@SPAMACCESS995.COM>
Message-ID: <N1iGc.1827$Wd.10078@ord-read.news.verio.net>
Source record: 92608
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:ZMKdnYMaU5RdNHTdRVn-vA@adelphia.com...
>
>
> Groom Lake wrote:
>
> > In Message-ID:<Kl6Gc.1758$%w5.429@okepread05> posted on Mon, 5 Jul 2004
> > 01:15:08 -0500, Rob Mills wrote:
> >
> >
> >
> >>I wasn't much into
> >>gab but enjoyed tinkering with the equipment more than gabbing on them
so
> >>soon sold out except for a CB I used in the truck. I drove an 18 for a
> >>living and retired in 84 and haven't keyed anything since. RM~
> >
> >
> > Back in '66 I put one of those (pre-bucket brigade) delay boxes* with a
> > spring and two transducers in line with my audio and some of the locals
> > thought the echo was due to the enormous power level, similar to 15
> > meter multipath, rather than just a precursor to today's echo-mike.
> > *note - those delay boxes were more commonly used in conjunction with
> > automotive 8-track players, and would make that distinctive boing effect
> > whenever you hit a pothole or crossed the tracks too fast. ;-)
>
> Well, since the topic is shifting, can anyone tell me what the echo is
> supposed to do? in my travels, with my CB on, I can "hear" people with
> echo mic's and I'll be darned if I can hear them well at all. Now echo
> AND way overmodulated, now there's the ticket to complete
> unintelligibility! (is that a word?)
>
> - Mike -
>

They "think" it makes them sound better or more cool, not sure which.
Problem is, most are turned up TOO far. Some isn't so objectionable and
doesn't sound bad, even though they're not supposed to be permitted per part
95. I've heard so many that sounded like they were talking either
underwater or with a mouth full of something. REALLY SUCKED.

Being both a ham and Cber, I can't see what their sense of existence is.
Then too, you got everyone and his brother cranking up the RF out, and if
they go channel hopping, that bleeds like hell. I had to take a double take
one time when I and a friend of mine were in another CB shop, and actually

heard two CBers swear off the extra garbage and go back to stock TO HEAR! WOW. I asked my friend if I heard right, and he agreed. I don't do any mods to CBs or other radios unless permitted by law or needed to get the thing working, when a unit comes to my shop. Many don't like my approach, but so be it.

Lou

188. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 19:42:23 UTC
From: fractenna@aol.com
Message-ID: <20040705154223.19394.00001143@mb-m04.aol.com>
Source record: 92609

RE: Audio enhancement

All modern ham rigs incorporate compression in the audio chain; this effective pushes up the room sound a bit without the echo/reverb being overpowering.

It is puzzling why hams have not commonly adapted well-known psychoacoustic observables to increase intelligibility. These include: a 50 ms delay on transmit; and binaural (delay and phase invert) synthesis on received. The latter has had some exposure in recent years.

I recall using both the of these circa 1985 at Field Day with pro audio outboard boxes. The problem--on transmit--is isolating them from the RF so they don't overload.

CB has always had an over the top approach to audio--which rather defeats the purpose of said synthesis.

Anyway, old stuff, well-known to music producers and some audio engineers.

73,
Chip N1IR

189. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 21:01:47 UTC
From: sideband <AINO8SPAMW@cac.net>
Message-ID: <%kjGc.32909$eH1.15725857@newssvr28.news.prodigy.com>
Source record: 92610

Oh, I want pictures! Gotta see this.

de AI8W, Chris

Gary V. Deutschmann, Sr. wrote:
> Hi Gang
>
> Last night was the 4th (doh, we all knew that!)
>
> But how many of you woke up this morning with a rocket perched upside
> down on top of your tallest antenna?
>
> I have a Diamond triband 2/220/440 antenna up some 60+ feet.
> The remains of a finned rocket about 10 to 12 inches tall has managed
> to land on top of this antenna, nose down fins up. Right now it's at
> the very top, but I'm sure in a few days will probably slide down the
> antenna shaft coming into contact with the radials.
>
> Should I worry about this (chemical reactions) or just forget it and
> let time and weather take it's toll on the remains?
>
> TTUL - 73+ de Gary - KGï¿½ZP
>
>

190. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 21:25:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6ohje0t7eep6cc0rgp3lsgp3794aq04ite@4ax.com>
Source record: 92611

On 05 Jul 2004 11:59:51 EDT, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>Should I worry about this (chemical reactions)

Warm up a linear and wait for Bastille Day.

191. Re: Computeradio "Dream Radio One" revealed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-05 22:28:15 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040705182815.19363.00000987@mb-m17.aol.com>
Source record: 92612

>
>Trying to recap some of the original msg, I said I made a Dayton presentation
>in
>either 1983 or 84. My only time at Dayton since then was in 2001 to kick off
>the
>debut of Reflections 2, but I made no presentation then. Were you there in
>either 1983 or 84, or could you have mistaken me for someone else at a later
>time?

Check the Recycle bin?

I was almost every year in Dayton untill we moved from Toronto to NJ in 86. I am still uncomfortable with Smith chart, I rather design the antennas to be 50 ohms to 50 ohm cable and when monoband, I prefer to use Bazooka balun/filter. I prefer moving waves rather than them standing :-)

Congrats on your 85 and going, just stay away from carbohydrates and have a drink with meal.

We are about 40 min drive from Manhattan and I go there few times a week to "enjoy" the traffic and parking tickets.

73 and thanks again!

Yuri

192. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 01:12:09 UTC
From: rhf-newsgroups@pacbell.net
Message-ID: <ff3145e8.0407051712.257c62bb@posting.google.com>
Source record: 92613
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

RC,

Instead of playing the 'game' of posting a reply to anything I post.

Why don't you be helpful to the original poster and attempt
to answer his question.

First - What type (name) antenna is he talking about ?

Second - What is your 'expert' opinion about this antenna ?

Third - What are the technical aspects of this antenna ?

- - - - - The Original Question - - - - -

Hi,

Does anyone remember a weird compact antenna that was featured
in a 60's (or early 70's) edition of "73" magazine. Had 2 etched
PCBs (like spaced plates) mounted inside a plastic bucket, and
fed with coax?

Does anyone know more details of this?

JEFF
ZL3TNV

- -

It's much nicer and rewarding to be honestly helpful
. . . then simply hateful.

A 'noted' Yahoo ~ RHF
.
.
= = = Richard Clark <kb7qhc@comcast.net> wrote in message
= = = news:<6c0je0hlen1kb6264e68vrdko81ap5098o@4ax.com>...
> On 5 Jul 2004 01:26:17 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:
>
> >The EH antenna has exceptional promise. It is about 10' in
> >diameter, requires no extensive underground radials, uses
> >approximately 75% less energy and is more efficient.
>
> Hi OM,
>
> More efficient that what, a resistor? 75% less energy than what, a
> resistor?

>
> The eh antenna is one of several of a class that take more effort for
> less return than simply putting up as much wire as you have room for -
> even if it is the same size as any of these "amazing!" antennas.
>
> The absurd claims that attend the cfa/eh/fractal crowing societies is
> matched by their inability to prove them except through their own
> special math (never mind the S-Meter).
>
> However, there are those who argue SWLers need poor antennas and I
> suppose these fit the bill nicely. The technical equivalent of cell
> phones VS string-and-dixie cups tho'.
>
> 73's
> Richard Clark, KB7QHC
.

193. Re: Let's fight against Inforelation.com - spaming service!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 01:46:14 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-C1E1BD.17470905072004@netnews.worldnet.att.net>
Source record: 92614
Body handling: HTML body converted to readable text

In article ,
Jilly Manner wrote:

>
>
>
>
>
Let,s fight against Inforelation.com-spamming service!!!

>
Hallo,

>
Here is Jilly.Let,s do something with this crazy Inforelation.com.

>
By the accident I have visited this web? and I,m terrified with what
> people
> wish to know and the money they offer!This service is designed for crazy
> scientists or maniacs?Like the one who uses nickname >=OB?

>
And who pays in absolutelyextravagant and suspicious way in my
> opinion.

>
Jilly Manner

>
Jilly@hotmail.com

>
>
>

How aboutr we FIGHT against CROSSPOSTERS like you. maybe just line
them up and shoot them.......... How about that?

me

194. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 02:02:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b21ke0tb6j9m8fpdh924ad31niccrs36np@4ax.com>
Source record: 92615
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

On 5 Jul 2004 18:12:09 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:

>RC,
>
>Instead of playing the 'game' of posting a reply to anything I post.

Your ego is showing.

>Why don't you be helpful to the original poster and attempt
>to answer his question.

Like you? ;-)

Instead of playing twenty questions:
>First - What type (name) antenna is he talking about ?
>Second - What is your 'expert' opinion about this antenna ?
>Third - What are the technical aspects of this antenna ?
Let's all note that it was your introduction of 6 off-topic links to
an antenna who I have already responded to against these same three
preceding questions.

Hi OM,

The eh and their ilk are on every sucker list on the web. It is a
simple matter to NOT cross post your responses if they don't shine
under examination. It is also a simply matter to either stay
on-topic, or to at least follow your own side-thread.

Respond to the technical issue, or learn to unlink your posts.

73's
Richard Clark, KB7QHC

195. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 02:13:00 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <MUnGc.16068$qw1.12746@nwrddc01.gnilink.net>
Source record: 92616

Does the rocket have a "Red Glare"?
"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:40e9787a.172663609@news.galilei.com...
> Hi Gang
>
> Last night was the 4th (doh, we all knew that!)
>
> But how many of you woke up this morning with a rocket perched upside
> down on top of your tallest antenna?
>
> I have a Diamond triband 2/220/440 antenna up some 60+ feet.
> The remains of a finned rocket about 10 to 12 inches tall has managed
> to land on top of this antenna, nose down fins up. Right now it's at
> the very top, but I'm sure in a few days will probably slide down the
> antenna shaft coming into contact with the radials.
>
> Should I worry about this (chemical reactions) or just forget it and
> let time and weather take it's toll on the remains?
>
> TTUL - 73+ de Gary - KGZP
>
>

196. Re: Salt Water Canal antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 02:16:03 UTC
From: 'Doc <ltdoc@yahoo.com>
Message-ID: <yaednT3cF8D5lnfd4p2dnA@cwis.net>
Source record: 92617

Steve,
If the salt water isn't used as 'part' of the antenna system (ground for a vertical, perhaps?), it isn't going to make a lot of difference, one way or the other. Are the palm trees far enough apart, and are there enough of them to put up a dipole?
'Doc

197. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 02:37:46 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <l93ke05106rqnljkfrl5dak8h42rf869hk@4ax.com>
Source record: 92618

On 05 Jul 2004 11:59:51 EDT, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

Story snipped.

What are the odds? 'bout the same as this:

About a year ago (7-8-2003) the XYL and I loaded up the fifth-wheel trailer and hit the road. I don't operate mobile but I did pack the TS-870 and some coax and wire.

One of our first stops after leaving Tucson was to visit an old friend and fellow Hughes retiree, Darv, W7KNA, in Eagar, AZ. We spent a night (7-9-2003) at his place and headed then headed east. We didn't set any schedules or even talk about trying to keep in touch. Darv usually works 40 meters.

On August 26 we were camped in Governor Dodge SP in Wisconsin. Finally there were some trees and we were staying for a week or so visiting the parents of my next door neighbor so I pulled a 20 meter dipole up into the trees. I tuned 20 meters for a bit and not hearing much I decided to call CQ on 14.195.

You guessed it. On the first call I was answered by W7KNA.

Again. No schedule or plans to look for each other. Two guys randomly on the same frequency at the same time with propagation to each other.

Wes N7WS

198. 2 Meter Beam 4 element design wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 02:46:32 UTC
From: Dustin <fordman@btc-bci.com>
Message-ID: <iooGc.62$Rx.52340@news.uswest.net>
Source record: 92619

hello, I am looking for a 2 Meter 4 element beam design, preferably for a 4 foot boom, because I have an 2M antenna right now, but it's not configured for 144.200 like I want to use if for, the elements are too short, and I wanted to basically know if the spacing is correct for 144.200 or would I have to change that along with the element length. the frequency of the antenna now is approx. 165.00. Thank you very much.

KC8ZEM

199. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 03:13:09 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <is5ke0lkuels3bq0u571bffiv2qmnitthu@4ax.com>
Source record: 92620

On Tue, 06 Jul 2004 02:13:00 GMT, "Radio Man" <puns@verizon.net>
wrote:
>"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
>news:40e9787a.172663609@news.galilei.com...
>> Hi Gang
>>
>> Last night was the 4th (doh, we all knew that!)
>>
>> But how many of you woke up this morning with a rocket perched upside
>> down on top of your tallest antenna?
>>
>> I have a Diamond triband 2/220/440 antenna up some 60+ feet.
>> The remains of a finned rocket about 10 to 12 inches tall has managed
>> to land on top of this antenna, nose down fins up. Right now it's at
>> the very top, but I'm sure in a few days will probably slide down the
>> antenna shaft coming into contact with the radials.
>>
>> Should I worry about this (chemical reactions) or just forget it and
>> let time and weather take it's toll on the remains?
>>
>Does the rocket have a "Red Glare"?

Sounds more like a model rocket than a firework. If it is, the
materials may be more weatherproof.

In either case, it doesn't quite seem within normal legal usage near a
residential area.

As said, most likely any propellant is gone, and the main concern
would be physical damage from the wind moving it around.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

200. Re: Rotatable Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 04:06:25 UTC
From: bob <bob.elder@nospam.com>
Message-ID: <4ef2f79aec0b19a04f2acad252ca827f@news.teranews.com>
Source record: 92471

rh3x@erols.com wrote:
> Looking for a rotatable dipole covering 40-10M. Any company make
> one?
>
> Tks de Rich/N2JR
>
>
http://kg4ena.netfirms.com/store/nfoscomm/catalog/product_info.php?cPath=22_23&products_id
=74

Limited Space HF 40 Meters Antenna

For The RV And Apartment Dweller.
On a budget, Mobile in an RV, or live in a space-restricted environment?

Here's a great solution: HF Horizontal Polarized Di-pole Antenna
that will take those beams strait on.
With the station operating with gain and power, typically beam
antennas transmitting in the horizontal polarization.
By combining a pair "two" of our single band HF Mobile Stick
Antennas with tunable-tip's, you can have an ideal, single element,
horizontal dipole.
You are then transmitting and receiving in horizontally with
polarization.
Then by adding an inexpensive TV Type Rotor, you in effect have
Simple Rotatable Beam Antenna.
This antenna opens the world of HF communications for the
apartment dweller, RV HAM, Field-day Operating, and a variety of other
uses and applications.
o Features: The Antennas Features (2)HF-Stick Antennas heavy
Duty Copper Wire wound On 3/8" Fiberglass with Chrome Plated Brass
fittings and 17-7 Stainless whip..
o Hardened Aircraft Aluminum Mount

201. Re: 2 Meter Beam 4 element design wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 04:15:09 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <os7ke09a6lk10p0agnu0o6f4cjkh47omat@4ax.com>
Source record: 92472

On Mon, 5 Jul 2004 22:46:32 -0400, "Dustin" <fordman@btc-bci.com>
wrote:

>hello, I am looking for a 2 Meter 4 element beam design, preferably for a 4
>foot boom, because I have an 2M antenna right now, but it's not configured
>for 144.200 like I want to use if for, the elements are too short, and I
>wanted to basically know if the spacing is correct for 144.200 or would I
>have to change that along with the element length. the frequency of the
>antenna now is approx. 165.00. Thank you very much.
>
>KC8ZEM
>

Dustin,
As a Michigander (relocated to California 24 years ago from the Bay
City area) allow me to offer some assistance. If you want something
'on the cheap' the following site has just what you need - yagi's
built with wood & wire: http://www.clarc.org/Articles/uhf.htm

If you are willing to look at other options here's a Moxon rectangle
that will give 10.71 dBi and though designed for 146 it could scale to
144 with minimal difficulty: http://www.cebik.com/moxbld.html

Are you married to the idea of a 4' beam or are you willing to go
longer? A longer boom (and a few more elements) will improve your
range; if your'e willing here's another wood & wire antenna called a
Quagi that works nicely. I did an 8 element UHF version and made
contact over a distance of 126 miles using 5 watts - of course more
power made me more readable but the point is more boom = greater range
(as a general rule of thumb):
http://commfaculty.fullerton.edu/woverbeck/quagi.htm

On your existing yagi did you mean to say it's tuned for 145.00? If
so then just play with the feed to get a decent VSWR and change it to
horizontal polarization and you're ready to rock. I've used a
Cushcraft 4 element beam that was tuned for 146 and the VSWR at 144.2
was close to 3:1 and the polarization was wrong - it was taken down
and replaced with a nice M2 7 element. I do however still have the
instructions for the Cuschcraft and if you'd like to use them as a
guide to building something let me know and I'll scan them & send them
to you. The difference in tuning it is where you place the shorting
bars on the T-match and requires no change of element length or
spacing.

Hope this helps & let me know if you're interested in the Cushcraft
instructions.

73,
Howard KE6MAK

202. Re: How to Measure a 2M Yagi Impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 11:40:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <v26nAzRw+o6AFAd8@ifwtech.co.uk>
Source record: 92473

Dave Shrader wrote:
>Ian White, G3SEK wrote:
>> Dave Shrader wrote:
>>
>>> If the Yagi is to be tuned for MAXIMUM gain, and that is the
>>>objective, then Ro will be the lowest value at resonance.
>> That's an interesting assertion. Do you have further evidence for
>>it?
>>

(Apologies for the delay in replying to this, Dave. I've been away from the computer for two weeks.)

>I've been away from Yagis for many years. But, maximum gain requires
>maximum radiation which requires maximum current which requires lowest
>radiation resistance. Twenty years ago, or so, Ro of 15 to 20 ohms was
>common in high gain Yagis wher Gamma matching was used to raise the
>impedance to approximately 50 ohms. A slight reduction in gain allows
>Ro of close to 50 ohms.
>
>Kraus, Antennas, McGraw-Hill 1950, Chapter 11 provides the analysis for
>a simple 2 element 'Yagi' type array. In written terms, the driving
>point, feed point, resistance, ignoring losses, is the radiation
>resistance of the driven element minus the ratio of the mutual
>impedance to the self impedance of the parasitic elements. Far field
>gain is maximized by a term where the input power is divided by the net
>impedance of the driven element minus the net impedance contributed by
>the parasitic elements.
>
>Conclusion, maximum gain, in any configuration [3 element, 4 element,
>etc.], requires lowest Rr produced by highest mutual coupling.
>
This is stretching a simplified theoretical case, way beyond the point where it ceases to apply.

I agree that the maximum *theoretical* gain - ignoring losses - is achieved when the element currents are as high as possible, and the feedpoint resistance is as low as possible. This also requires that the element spacing is as close as possible... which leads to the interesting conclusion that a compact beam should have more gain than a full-sized one!

In practice, of course, this doesn't happen. The reason is that losses can *never* be ignored in this particular problem. As the element currents rise and the feedpoint impedance drops, the I^2*R losses in the

elements and the matching losses to 50R rapidly overtake any theoretical increase in gain.

This means that high-gain beams with deliberately high element currents are only a theoretical curiosity. The underlying theory has a valid place in academic textbooks such as Kraus, but it isn't relevant to practical antenna engineering. (Even superconducting elements and matching circuits wouldn't make such antennas practical.)

Also, it isn't correct to apply generalizations about 2- and 3-element yagis to a long, multi-element yagi. In particular, the first 2 or 3 elements of a long yagi cannot be considered in isolation from all the other elements.

It is true that gain optimization in multi-element yagis tends to reduce the feedpoint impedance towards 15-20R, but this is a remote side-effect of all the other design parameters. A low feedpoint impedance certainly isn't a desirable design aim in itself, because it leads to significant matching losses and a reduction in the SWR bandwidth.

Numerous designers have found that when they are getting close to a gain-optimized design, it is usually possible to raise the feed impedance back towards 50R by inserting an additional first director with a very close spacing ahead of the driven element. (This technique may have been developed after you ceased to take a close interest in yagi design, Dave.)

The close-spaced first director is mostly an impedance-changing device, and it has relatively few side-effects on the overall gain and pattern. With a multi-element yagi, it is usually possible to take out most of these side-effects in the next round of optimization. The result is a yagi that can be fed directly from 50R coax (through a balun) which eliminates matching losses and greatly improves the SWR bandwidth. If the re-optimization is done well, any decrease in gain is almost undetectable in simulation, and completely undetectable on the air.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

203. mfj 969

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 14:00:08 UTC
From: Denis O' Flynn <ei6hb@eircom.net>
Message-ID: <JfyGc.4004$Z14.4816@news.indigo.ie>
Source record: 92474

Hi folks

Blew my 969 tuner and purchased both boards from MFJ. However there are no calibration details with it. Anyoe has experience calibrating an MFJ 969?

Any details appreciated.

Denis EI6HB

204. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 14:07:17 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <40EAB215.9080800@psu.edu>
Source record: 92475
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

RHF wrote:
> RC,
>
> Instead of playing the 'game' of posting a reply to anything I post.
>
> Why don't you be helpful to the original poster and attempt
> to answer his question.
>
> First - What type (name) antenna is he talking about ?

A Dummy Load

> Second - What is your 'expert' opinion about this antenna ?

Makes a pretty good Dummy load

> Third - What are the technical aspects of this antenna ?

Acts like a Dummy load.

> - - - - - The Original Question - - - - -
>
> Hi,
>
> Does anyone remember a weird compact antenna that was featured
> in a 60's (or early 70's) edition of "73" magazine. Had 2 etched
> PCBs (like spaced plates) mounted inside a plastic bucket, and
> fed with coax?
>
> Does anyone know more details of this?
>
> JEFF
> ZL3TNV
>
> -
>
> It's much nicer and rewarding to be honestly helpful
> . . . then simply hateful.

Oh Gee, Richard isn't being hateful, just responding to your post
responding to the original posters msg.

The world of engineering is like this - gotta have a tough skin, yaknow?
rule 1 is extraordinary claims require extraordinary proof.

If your antenna works, no amount of his scorn will stop it.

<rest snipped>

- mike KB3EIA -

205. Re: Salt Water Canal antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 14:34:17 UTC
From: Steve KB8IPZ <steevo40@yahoo.com>
Message-ID: <nEyGc.9164$jJ3.7395@bignews5.bellsouth.net>
Source record: 92476

The lot is about 100' but the Palms run in a line of only about 60' Maybe I can put up an additional support at the lot line and hang a dipole. Any suggestions about the best multi band dipole????

"'Doc" <ltdoc@yahoo.com> wrote in message news:yaednT3cF8D5lnfd4p2dnA@cwis.net...
> Steve,
> If the salt water isn't used as 'part' of the antenna system (ground for
> a vertical, perhaps?), it isn't going to make a lot of difference, one way
> or the other. Are the palm trees far enough apart, and are there enough
> of them to put up a dipole?
> 'Doc
>
>
>

206. Re: mfj 969

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 15:08:52 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <8gzGc.188948$DG4.166574@fe2.columbus.rr.com>
Source record: 92477

I went through the calibration of my 949 recently by borrowing a buddy's Bird wattmeter and connecting it
in-line with my 949. The adjustment pots are easy enough to figure out from the silk screening and schematic.
I also used an external dummy load as the 949's resistor was outside the 5% tolerance. Easy enough to do with
good results and the only differnce between our units is a roller inductor.
73
Richard WB8KRN

"Denis O' Flynn" <ei6hb@eircom.net> wrote in message
news:JfyGc.4004$Z14.4816@news.indigo.ie...
> Hi folks
>
> Blew my 969 tuner and purchased both boards from MFJ. However there are no
> calibration details with it. Anyoe has experience calibrating an MFJ 969?
>
> Any details appreciated.
>
> Denis EI6HB
>
>

207. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 15:43:31 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <DMzGc.125415$2o2.6386944@twister.southeast.rr.com>
Source record: 92478

Several years ago I came by the bottom part of one and repaired it with Al
tubing purchased at the local hardware store. Also google on ringo ranger.
You may find enough info to build one.

"Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
news:pan.2004.07.04.06.28.59.321917@127.0.0.1...
> I am in the market for a used 10 meter ringo antenna (I believe vushcraft
> made this a long while back). I can't seem to find a local supplier for
> one. Anyone that happens to have one handy and is willing to sell at a
> reasonable price. I can be reached at n7zzt(at)hotmail(dot)com.
>
> thanks.
>
> DE N7ZZT
> Phoenix, Arizona
>
>
> --
> the difference between intelligence and stupidity is that intelligence
> has its limits.
>

208. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 16:34:56 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <40ead40c.57680640@news.galilei.com>
Source record: 92479

Hi Uncle Peter

GREAT IDEA!

Will Do and stick it on a web page so you can see it!

TTUL
Gary

209. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 16:55:54 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <40ead4b1.57845531@news.galilei.com>
Source record: 92480

Hi Wes

I LOVE hearing of rare incidents like that!

I was talking with an OM one night about 10 years ago, he was out in the Denver area, I don't remember off hand which band we were on, but in the background he had a 2 meter rig tuned to his local repeater. It was quiet, no traffic while I was talking with him at all. Then suddenly, as plain as day we heard a voice on the repeater come in about mid sentence of a Triple A towtruck driver talking to a stranded motorist, as the driver read back the license plate for verification, it was this fellows own car tags, so we paused our conversation so he could listen to the call, which must have been intermod of some type.

He was gone for a short while, but when he came back to the radio, he said, darnest thing, my car is in the garage! It was bugging him to no end, so he paused again to call Triple A. I hung around for about a half hour waiting for him and was just ready to call it quits when he gave me a call. That tags were from an adjoining state, but the irony of the whole thing was, both registered owners had near identical names. Not spelled the same, but close enough that they could be mistaken for each other when spoken orally. Dow Einsteen and Bo Weinstein or something close to those combinations.

I bumped into him on the same band about 3 months later and he was still talking about it!

TTUL
Gary

210. Re: Salt Water Canal antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 17:04:28 UTC
From: Mike Coslo <mjc5@psu.edu>
Message-ID: <40EADB9C.6000504@psu.edu>
Source record: 92481

Steve KB8IPZ wrote:
> The lot is about 100' but the Palms run in a line of only about 60' Maybe I
> can put up an additional support at the lot line and hang a dipole. Any
> suggestions about the best multi band dipole????

If you can get 60 feet of horizontal space in the palms, consider running a random length dipole, fed with ladder line, and use a tuner. You can either just run 60 feet, or might want to let some extra wire hang down at the ends to make it longer. I'd probably do the latter.

If you are afraid of ladder line, there are trapped dipoles that will serve the purpose.

It will be pretty hard to define a "best" multi band dipole. But I really do like the ladder line/tuner combination. And with auto tuners like the MFJ, which will tune ladder line pretty nicely, they are the way to go in my book

p.s. I use a manual tuner for mine, and even those aren't too bad. I even contest with it.

- Mike KB3EIA -

211. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 18:02:19 UTC
From: rhf-newsgroups@pacbell.net
Message-ID: <ff3145e8.0407061002.39c30019@posting.google.com>
Source record: 92482

RC,

The prior post to mine in this thread was a reference to the EH Antenna.

Yes I have an 'ego' and apparently your have an "EGO" too.

Hey, I try to be helpful and keep things positive.

I did not play Twenty Questions : I posted three.

I then provided Eight Links to more EH Antenna Information.
[Not Six Links.]

I also posted Eight Links related to the prior poster's
Screen Name: "JohnJacobJingleHimerSchmidt" {JJJHS}
[It's called relating to people / a side-bar.]

You have the tendency to state you opinions as facts; and
thereby discount all other opinions.

For some the EH Antenna may be a matter of 'faith' and to the
extent that it "Works" in some form or fashion: Hey It WORKS !
Your technical details valid or not, have very little relevance
to them and 'their' EH Antenna.

So Say I - My Opinions Stated as Facts ~ RHF
.
.
= = = Richard Clark <kb7qhc@comcast.net> wrote in message
= = = news:<b21ke0tb6j9m8fpdh924ad31niccrs36np@4ax.com>...
> On 5 Jul 2004 18:12:09 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:
>
> >RC,
> >
> >Instead of playing the 'game' of posting a reply to anything I post.
>
> Your ego is showing.
>
> >Why don't you be helpful to the original poster and attempt
> >to answer his question.
>
> Like you? ;-)
>
> Instead of playing twenty questions:
> >First - What type (name) antenna is he talking about ?
> >Second - What is your 'expert' opinion about this antenna ?
> >Third - What are the technical aspects of this antenna ?

> Let's all note that it was your introduction of 6 off-topic links to
> an antenna who I have already responded to against these same three
> preceding questions.
>
> Hi OM,
>
> The eh and their ilk are on every sucker list on the web. It is a
> simple matter to NOT cross post your responses if they don't shine
> under examination. It is also a simply matter to either stay
> on-topic, or to at least follow your own side-thread.
>
> Respond to the technical issue, or learn to unlink your posts.
>
> 73's
> Richard Clark, KB7QHC

212. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 20:11:32 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <UHDGc.101619$wH4.5652701@twister.southeast.rr.com>
Source record: 92484

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:DMzGc.125415$2o2.6386944@twister.southeast.rr.com...
> Several years ago I came by the bottom part of one and repaired it with Al
> tubing purchased at the local hardware store. Also google on ringo ranger.
> You may find enough info to build one.
>
> "Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> wrote in message
> news:pan.2004.07.04.06.28.59.321917@127.0.0.1...
> > I am in the market for a used 10 meter ringo antenna (I believe
vushcraft
> > made this a long while back). I can't seem to find a local supplier for
> > one. Anyone that happens to have one handy and is willing to sell at a
> > reasonable price. I can be reached at n7zzt(at)hotmail(dot)com.
> >
> > thanks.
> >
> > DE N7ZZT
> > Phoenix, Arizona
> >
> >
> > --
> > the difference between intelligence and stupidity is that intelligence
> > has its limits.
> >
>
>
google ringo manual and select the cushcraft site. Probably anough info in
the installation manual to build one.

213. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 20:11:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3utle0pr2hp0gck7f6df79aqom3b57oakf@4ax.com>
Source record: 92483

On 6 Jul 2004 11:02:19 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:

>Yes I have an 'ego' and apparently your have an "EGO" too.

Certainly, mine is earned.

>Hey, I try to be helpful and keep things positive.

Posting as a substitute for Prozac, or is it Lithium?

>I did not play Twenty Questions : I posted three.

Hmm, a matter of degree not substance. As for substance I note you have no interest in engaging the outcome of your questions' answers nor in pursuing the technical claims of your submitted eh antennas. So I will respond to your style and expose your weakness in that regard too. ;-)

>For some the EH Antenna may be a matter of 'faith' and to the
>extent that it "Works" in some form or fashion: Hey It WORKS !
>Your technical details valid or not, have very little relevance
>to them and 'their' EH Antenna.

Rabbit ears for AM reception WORK for the faithful too. Such a recommendation! It's like short-changing the blind to teach them self sufficiency.

>So Say I - My Opinions Stated as Facts ~ RHF

Actually "so write you." No one can hear you scream on the internet.

For others following the poor quality of discussion surrounding the eh antenna; this design has been field tested, studied and analyzed quite thoroughly on rec.radio.amateur.antenna. It is quite an education to simply look at the field data offered by the proponents themselves (who are just as incapable in reading engineering reports as any Yahoo).

For the sheer bulk and complexity of the eh design, their own reports shows it to be fully 0.1% to 1% efficient compared to a simple design. Of course, few of you may be capable of erecting this simple design. However, going to the trouble with the eh when you could as easily use rabbit ears purchased at Radio Shack must bring with it what Yahoo cites as the misty-eyed boon of faith (which accounts for easily 20 over S9 signals in an S1 field of noise where the faithless only hear static).

Henceforth we can call these designs Faith-Gain Antennas. It means that if you discard tuners, preselectors, tuned antennas, and simply use a wire coat hanger; that if you squeeze your eyes hard enough and fall to your knees with folded hands held slightly above brow level, then you too can enjoy the melodious tongues from other lands communicating to your inner heart - don't forget to turn on the radio.

73's
Richard Clark, KB7QHC

214. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 21:06:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ge4me0tpb6ita4v18nogve2q11r88hbohl@4ax.com>
Source record: 92485

On Tue, 06 Jul 2004 16:40:20 -0400, william ewald
<wewald@bellsouth.net> wrote:

>On Tue, 06 Jul 2004 20:11:47 GMT, Richard Clark <kb7qhc@comcast.net>
>wrote:
>
>>
>>Rabbit ears for AM reception WORK for the faithful too.
>>73's
>>Richard Clark, KB7QHC
>
>AM reception? I've never tried that. Did you mean FM?

Hi Bill,

AM. You've never tried it when your car antenna works every time? I
bet you have rabbit ears embedded in your windshield.

O Ye of little Faith!

Yahoo's very limited experience will probably miss this simple
observation of an antenna that WORKS. He would also probably miss the
common sense suggestion that AM DXers use automobile radios for their
listening - on long antennas.

>I keep praying for the "whole house wiring" antenna to work with my
>TV.

Won't work because the BPL is resonating with the fractal topology?

73's
Richard Clark, KB7QHC

215. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 21:20:49 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <RIEGc.101624$wH4.5664959@twister.southeast.rr.com>
Source record: 92486

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>
>
Sorry about that, dont know how the word pipe got clipped off

216. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 21:29:42 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <aREGc.101625$wH4.5666039@twister.southeast.rr.com>
Source record: 92487

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
> Subject says it all
>
>
Found copper pipe I was looking for. Saw a plumber's truck at local
resturaunt that had some in his rack. Got an 8.5 ft piece for $20.
Mcmaster's wanted 20 plus shipping for a 10ft length. Funny thing though,
The guy didnt get in his truck after he sold me the pipe. Thats begun to
bother me a bit.

217. Re: QUESTION & REQ: Real Audio Radio Recorder with Schedule/Timer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 21:43:43 UTC
From: Ken Finney <kenneth.c.finney@boeing.com>
Message-ID: <I0G9ou.C8s@news.boeing.com>
Source record: 92489

Total Recorder from www.highcriteria.com is probably the best buy in
software.

"Kinsey 6" <kinsey6@somewhere.outthere.com> wrote in message
news:Xns951A46AAA5AB0kinsey6@65.32.1.7...
> Alright. I don't know what I'm looking for at all, so I figured I would
ask
> all of you. There is this streaming real audio radio show I want to
record.
> It is on weekdays from noon until 3pm, but I have no idea what program I
> should get to record it on a schedule.
>
> Any guidance would be great. Thanks.
>
>
>
> Kinsey6

218. Re: Looking for source of 1.5 inch copper in NC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-06 21:45:50 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <fo6me0hg3jnfqvvcbj82nj1oa17s1dhfvc@4ax.com>
Source record: 92488

On Tue, 06 Jul 2004 21:29:42 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>"Jimmie" <Gfender@carolina.rr.com> wrote in message
>news:bSCFc.101572$2o2.5813107@twister.southeast.rr.com...
>> Subject says it all
>>
>>
>Found copper pipe I was looking for. Saw a plumber's truck at local
>resturaunt that had some in his rack. Got an 8.5 ft piece for $20.
>Mcmaster's wanted 20 plus shipping for a 10ft length. Funny thing though,
>The guy didnt get in his truck after he sold me the pipe. Thats begun to
>bother me a bit.
>
For small quatities that would be the simplest. Where McMaster really
shines is for getting really odd types of material.

I'm surprised that the local Home Depot or Lowe's or other home center
didn't have it, even though PVC and CPVC have taken over most of the
market for plumbing.

Tough to get the plastic pipe to conduct RF, though.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

219. Re: butternut and 17 meters problem

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 02:21:10 UTC
From: N4LQ <n4lq@iglou.com>
Message-ID: <40eb5de4$1_1@news.iglou.com>
Source record: 92490

I've had the same problem with my Bnut and so have many others. 17m just doesn't quite match up.

--
Steve N4LQ
"John WA3YMM" <jmarkinack@verzion.net> wrote in message news:hlxFc.6276$zn2.2563@nwrdny03.gnilink.net...
> Greeting!
>
> I am having problem tuning my new Butternut HF9V vertical on 17 meters.. My
> antenna is ground mounted 60 feet from the house or anything else. I have 40
> radials surface mounted just under the grass... The swr on all the other
> bands is about 1.4 to 1 or less, but on 17 meters its 2.4 to 1 causing my
> ft-847 to fold back power.. Though! the high swr, I am still able to make
> contacts to Europe and other DX on the band with little effort with less
> than a 100 watts... I do have a MJF-259 analyzer and still have problems.. I
> have spent hours at attempting to get a lower swr
>
> Any Help would be appreciated
>
> Thx in advance ` 73
>
> WA3YMM
>
>

220. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 02:28:44 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <wdJGc.30809$qw1.1671@nwrddc01.gnilink.net>
Source record: 92491

This is called "Synchronicity"-----Meaningful coincidence.
There is a yahoo group that discusses this
"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:40ead4b1.57845531@news.galilei.com...
> Hi Wes
>
> I LOVE hearing of rare incidents like that!
>
> I was talking with an OM one night about 10 years ago, he was out in
> the Denver area, I don't remember off hand which band we were on, but
> in the background he had a 2 meter rig tuned to his local repeater.
> It was quiet, no traffic while I was talking with him at all. Then
> suddenly, as plain as day we heard a voice on the repeater come in
> about mid sentence of a Triple A towtruck driver talking to a stranded
> motorist, as the driver read back the license plate for verification,
> it was this fellows own car tags, so we paused our conversation so he
> could listen to the call, which must have been intermod of some type.
>
> He was gone for a short while, but when he came back to the radio, he
> said, darnest thing, my car is in the garage! It was bugging him to
> no end, so he paused again to call Triple A. I hung around for about
> a half hour waiting for him and was just ready to call it quits when
> he gave me a call. That tags were from an adjoining state, but the
> irony of the whole thing was, both registered owners had near
> identical names. Not spelled the same, but close enough that they
> could be mistaken for each other when spoken orally. Dow Einsteen and
> Bo Weinstein or something close to those combinations.
>
> I bumped into him on the same band about 3 months later and he was
> still talking about it!
>
> TTUL
> Gary
>

221. Re: How to Measure a 2M Yagi Impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 03:13:48 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40eb6a6c$0$5856$39cecf19@news.twtelecom.net>
Source record: 92492

As a sidebar, we found while testing 432 beams at Central States, that our older beams, only a couple years, seemed low in gain. We ScothBrighted the elements, Al welding rod, as I remember, with a hobby brass driven element and T match, and got 3 or 4 10th's more on a 17 foot beam I designed for EME than I had on the 1st range test.

Sorry about the looong sentence.

tom
K0TAR

Ian White, G3SEK wrote:

> I agree that the maximum *theoretical* gain - ignoring losses - is
> achieved when the element currents are as high as possible, and the
> feedpoint resistance is as low as possible. This also requires that the
> element spacing is as close as possible... which leads to the
> interesting conclusion that a compact beam should have more gain than a
> full-sized one!
>
> In practice, of course, this doesn't happen. The reason is that losses
> can *never* be ignored in this particular problem. As the element
> currents rise and the feedpoint impedance drops, the I^2*R losses in the
> elements and the matching losses to 50R rapidly overtake any theoretical
> increase in gain.
>
> This means that high-gain beams with deliberately high element currents
> are only a theoretical curiosity. The underlying theory has a valid
> place in academic textbooks such as Kraus, but it isn't relevant to
> practical antenna engineering. (Even superconducting elements and
> matching circuits wouldn't make such antennas practical.)
>
> Also, it isn't correct to apply generalizations about 2- and 3-element
> yagis to a long, multi-element yagi. In particular, the first 2 or 3
> elements of a long yagi cannot be considered in isolation from all the
> other elements.
>
> It is true that gain optimization in multi-element yagis tends to reduce
> the feedpoint impedance towards 15-20R, but this is a remote side-effect
> of all the other design parameters. A low feedpoint impedance certainly
> isn't a desirable design aim in itself, because it leads to significant
> matching losses and a reduction in the SWR bandwidth.
>
> Numerous designers have found that when they are getting close to a

> gain-optimized design, it is usually possible to raise the feed
> impedance back towards 50R by inserting an additional first director
> with a very close spacing ahead of the driven element. (This technique
> may have been developed after you ceased to take a close interest in
> yagi design, Dave.)
>
> The close-spaced first director is mostly an impedance-changing device,
> and it has relatively few side-effects on the overall gain and pattern.
> With a multi-element yagi, it is usually possible to take out most of
> these side-effects in the next round of optimization. The result is a
> yagi that can be fed directly from 50R coax (through a balun) which
> eliminates matching losses and greatly improves the SWR bandwidth. If
> the re-optimization is done well, any decrease in gain is almost
> undetectable in simulation, and completely undetectable on the air.
>
>
>

222. Re: What are the ODDS? - my one...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 08:16:25 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <tjOGc.18$KC6.12@newsfe1-win.ntli.net>
Source record: 92493

"Radio Man" <puns@verizon.net> wrote in message
news:wdJGc.30809$qw1.1671@nwrddc01.gnilink.net...
> This is called "Synchronicity"-----Meaningful coincidence.
> There is a yahoo group that discusses this
> "Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
> news:40ead4b1.57845531@news.galilei.com...
> > Hi Wes
> >
> > I LOVE hearing of rare incidents like that!

Well mine was as follows.....

In the early 1980s I was working as a salesman in a marine instrumentation manufacturer in South UK and much of our product went to Aberdeen in Scotland about 500 miles North of us, in the oil exploration days in the North Sea. I spoke to about 50 people up there regularly (sales) and "knew them" quite well / recognised their voices......

One day I was dialling "X" and got a crossed line - I listened for a few seconds and then couldn't believe my ears... - it was "Y" talking to "Z", both of whom I knew, and both of whom were discussing buying something from me (my company) each was in a different company up there about 5 miles apart.... I broke in and they could hear me too and for a short while we were all aghast at how tiny those odds must have been.

I rarely get a cross line let alone with anyone I know, let alone with two people I know, and let alone talking about me !!! It will never happen again..... There's something slightly spooky about that..

Nick

223. US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 09:15:15 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <DaPGc.21$oj1.0@newsfe4-gui.ntli.net>
Source record: 92494

Need to buy some kit when in the US and am looking for Ham outlets that will despatch to my relatives out there, or to me here in UK. Can someone please recommend me some suppliers ?

Thanks,

Nick

224. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 09:31:53 UTC
From: rhf-newsgroups@pacbell.net
Message-ID: <ff3145e8.0407070131.690019d2@posting.google.com>
Source record: 92495

= = = Richard Clark <kb7qhc@comcast.net> wrote in message
= = = news:<3utle0pr2hp0gck7f6df79aqom3b57oakf@4ax.com>...
> On 6 Jul 2004 11:02:19 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:
>
> >Yes I have an 'ego' and apparently your have an "EGO" too.
>
> Certainly, mine is earned.

RC - I am 'certain' that you "Believe" that.
.
.
>
> >Hey, I try to be helpful and keep things positive.
>
> Posting as a substitute for Prozac, or is it Lithium?

RC - You again seem to be the 'expert' in his area of endeavor.
.
.
>
> >I did not play Twenty Questions : I posted three.
>
> Hmm, a matter of degree not substance. As for substance I note you
> have no interest in engaging the outcome of your questions' answers
> nor in pursuing the technical claims of your submitted eh antennas.

RC - The topic became EH Antennas, and I posted "Links" for the
original poster to go to and explore that subject; if that was
his continued interest. I am sure that a YAHOO eGroup with over
600 Members and more than 4600 Messages posted; will provide more
information then I could.

"EH Antennas" eGroup on YAHOO !
http://groups.yahoo.com/group/eh-antenna/
.
.
> So I will respond to your style and expose your weakness in that
> regard too. ;-)

RC - What Ever Winds Your Clock.
.
.
>
> >For some the EH Antenna may be a matter of 'faith' and to the
> >extent that it "Works" in some form or fashion: Hey It WORKS !
> >Your technical details valid or not, have very little relevance

> >to them and 'their' EH Antenna.
>
> Rabbit ears for AM reception WORK for the faithful too.

RC - When all you have is a single short WHIP Antenna built into your
'portable' AM/F/Shortwave Radio. A pair of "TV Rabbit Ears" properly
connected to the radio; may indeed function better as an Antenna.

Hey What Works, WORKS !
.
.
> Such a recommendation! It's like short-changing the blind to
> teach them self sufficiency.

RC - If the Motive and Goal is "To Teach" and not to 'steal';
and if the Lesson is Learned. Then dealing with the realities
of the world is part of 'being' Self Sufficient.
.
.
>
> >So Say I - My Opinions Stated as Facts ~ RHF
>
> Actually "so write you."

RC - That is True.
.
.
> No one can hear you scream on the internet.

RC - That is true, but they may see you SCREAM :-[]
.
.
>
> For others following the poor quality of discussion surrounding the eh
> antenna; this design has been field tested, studied and analyzed quite
> thoroughly on rec.radio.amateur.antenna.

RC - They may wish to also seek an 'alternative' view point from
the EH Antennas eGroup on YAHOO; with it's 600+ Members and more
than 4600 Messages posted.

"EH Antennas" eGroup on YAHOO !
http://groups.yahoo.com/group/eh-antenna/
.
.
> It is quite an education to
> simply look at the field data offered by the proponents themselves
> (who are just as incapable in reading engineering reports as any
> Yahoo).

RC - Yes as you have 'noted' I am Yahoo.
.
.

>
> For the sheer bulk and complexity of the eh design, their own reports
> shows it to be fully 0.1% to 1% efficient compared to a simple design.
> Of course, few of you may be capable of erecting this simple design.

RC - For those who wish to seek an 'alternative' view point from
from yours. I would suggest that they check-out the "EH Antennas"
eGroup on YAHOO; with it's 600+ Members and more than 4600 Messages
posted about the EH Antenna by actual users of the EH Antenna.

"EH Antennas" eGroup on YAHOO !
http://groups.yahoo.com/group/eh-antenna/
.
.
> However, going to the trouble with the eh when you could as easily use
> rabbit ears purchased at Radio Shack must bring with it what Yahoo
> cites as the misty-eyed boon of faith (which accounts for easily 20
> over S9 signals in an S1 field of noise where the faithless only hear
> static).

RC - When all you have is a single short WHIP Antenna built into your
'portable' AM/F/Shortwave Radio. A pair of "TV Rabbit Ears" properly
connected to the radio; may indeed function better as an Antenna.

Hey What Works, WORKS !
.
.
>
> Henceforth we can call these designs Faith-Gain Antennas.

RC - Considering the amount of Religious Programming on the
Shortwave Bands. A "Faith-Gain" Antenna just may be the type
of Marketing Buzz Word that will sell an Aerial type Product
at a Heavenly Price.

Faith-Gain Antennas - How They Work... God Only Knows ? ? ?

.
.
> It means
> that if you discard tuners, preselectors, tuned antennas, and simply
> use a wire coat hanger; that if you squeeze your eyes hard enough and
> fall to your knees with folded hands held slightly above brow level,
> then you too can enjoy the melodious tongues from other lands
> communicating to your inner heart

RC - Ah the Things that Dreams are made of . . .
.
.
> - don't forget to turn on the radio.

RC - Thank You I Won't.
.

.
>
> 73's
> Richard Clark, KB7QHC

~ RHF
.

225. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 09:41:35 UTC
From: rhf-newsgroups@pacbell.net
Message-ID: <ff3145e8.0407070141.6949c09f@posting.google.com>
Source record: 92496
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

MC,

"If your antenna works, no amount of his scorn will stop it."

If Your Antenna Works... Your Will Hear and Be Heard [.]

Hey, What Works... WORKS ! ~ RHF
.
.
= = = Mike Coslo <mjc5@psu.edu> wrote in message
= = = news:<40EAB215.9080800@psu.edu>...
> RHF wrote:
> > RC,
> >
> > Instead of playing the 'game' of posting a reply to anything I post.
> >
> > Why don't you be helpful to the original poster and attempt
> > to answer his question.
> >
> > First - What type (name) antenna is he talking about ?
>
> A Dummy Load
>
>
> > Second - What is your 'expert' opinion about this antenna ?
>
> Makes a pretty good Dummy load
>
>
> > Third - What are the technical aspects of this antenna ?
>
> Acts like a Dummy load.
>
>
>
> > - - - - - The Original Question - - - - -
> >
> > Hi,
> >
> > Does anyone remember a weird compact antenna that was featured
> > in a 60's (or early 70's) edition of "73" magazine. Had 2 etched
> > PCBs (like spaced plates) mounted inside a plastic bucket, and
> > fed with coax?
> >

> > Does anyone know more details of this?
> >
> > JEFF
> > ZL3TNV
> >
> > -
> >
> > It's much nicer and rewarding to be honestly helpful
> > . . . then simply hateful.
>
> Oh Gee, Richard isn't being hateful, just responding to your post
> responding to the original posters msg.
>
> The world of engineering is like this - gotta have a tough skin, yaknow?
> rule 1 is extraordinary claims require extraordinary proof.
>
> If your antenna works, no amount of his scorn will stop it.
>
> <rest snipped>
>
> - mike KB3EIA -
.

226. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 11:46:42 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <umnne0tujoa5qaljrbs2tv9fd7djlilaho@4ax.com>
Source record: 92497

On Wed, 07 Jul 2004 09:15:15 GMT, "nick smith" <NickS@ntlworld.com>
wrote:

>Need to buy some kit when in the US and am looking for Ham outlets that will despatch to
>my relatives out there, or to me here in UK. Can someone please recommend me some
>suppliers ?
>
Ham Radio Outlet (HRO) http://www.hamradio.com/

Amateur Electronic Supply (AES) http://www.aesham.com/

Texas Towers http://www.texastowers.com/

I am sure there are others, but these three are about the biggest.

My personal experience is only with HRO, as they have a shop about an
hour's drive from here.

Having it sent to a US address, and then sent to you, might simplify
things a bit. The first two above will do international orders, TT
will not.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

227. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 12:31:28 UTC
From: Helmut <MyCallSign@qsl.net>
Message-ID: <ccgqer$r1f$07$1@news.t-online.com>
Source record: 92498

Hi, Nick,

Gary is absolutely right, let the stuff been sent to your relatives, whatever it is, it is much cheaper over there. BTW try www.gigaparts.com they have good prices, and they also ship to EU. Then take a week or two off your work and fly to your relatives to pick it up. The price difference will pay for your travel.

To avoid customs troubles (not about the customs tax, HAM gear is not taxable or taxfree) but the CE certification, which the US-rigs dont have, It is much easier to import the gear by yourself, so you can stet this is used amateur radio gear, maybe you put a sticker with your callsign on it.

Two OM I am friend with did both things. One ordered a TS2000 from Gigaparts, delivered within two weeks to Austria, then four weeks of hassles with the customs about the CE sticker. It took him quite a bit of effort to put in to convince the customs of the identicality of the US and EU radios.

The other one flew to Hamvention at Dayton this year, bought a TS480 for less than half the price of Austria, had a great time and imported the "used" radio with no problems.

Hope that helps for you also, Nick.

73 de OE8SOQ
Helmut

"Gary S." <Idontwantspam@net> schrieb im Newsbeitrag
news:umnne0tujoa5qaljrbs2tv9fd7djlilaho@4ax.com...
| On Wed, 07 Jul 2004 09:15:15 GMT, "nick smith" <NickS@ntlworld.com>
| wrote:
|
| >Need to buy some kit when in the US and am looking for Ham outlets that
will despatch to
| >my relatives out there, or to me here in UK. Can someone please
recommend me some
| >suppliers ?
| >
| Ham Radio Outlet (HRO) http://www.hamradio.com/
|
| Amateur Electronic Supply (AES) http://www.aesham.com/
|
| Texas Towers http://www.texastowers.com/
|
| I am sure there are others, but these three are about the biggest.
|

| My personal experience is only with HRO, as they have a shop about an
| hour's drive from here.
|
| Having it sent to a US address, and then sent to you, might simplify
| things a bit. The first two above will do international orders, TT
| will not.
|
| Happy trails,
| Gary (net.yogi.bear)
| ---
| at the 51st percentile of ursine intelligence
|
| Gary D. Schwartz, Needham, MA, USA
| Please reply to: garyDOTschwartzATpoboxDOTcom

228. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 13:32:09 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <tXSGc.14346$z81.6029@fed1read01>
Source record: 92499

About 60 USA Ham Radio stores at URL:
http://ac6v.com/stores.htm

--
Lamont Cranston

The Shadow Knows
"nick smith" <NickS@ntlworld.com> wrote in message
news:DaPGc.21$oj1.0@newsfe4-gui.ntli.net...
> Need to buy some kit when in the US and am looking for Ham outlets that
will despatch to
> my relatives out there, or to me here in UK. Can someone please
recommend me some
> suppliers ?
>
> Thanks,
>
> Nick
>
>

229. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 14:30:08 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cch1dg$8ih$1@mail.specsol.com>
Source record: 92500

Gary V. Deutschmann, Sr. <raiar@bbs.galilei.com.nospam> wrote:
> Hi Wes

> I LOVE hearing of rare incidents like that!

OK.

1969, Osan AFB, ROK.

I'm an Army E-5 and go into badge and ID to get a new ID card and plop my papers on the counter.

Guy behind the counter gives me and my papers the triple take, gets a set of papers of a desk, plops them on the counter and says "This guy left 10 minutes ago, what's going on here".

I see a picture of what seems to be me as an Air Force lieutenant.

Same height, weight, color of hair and eyes, same mustache, same first and last name, facial features close enough to pass. The only difference was our middle initials and Air Force instead of Army.

It took a while to get my ID card...

--
Jim Pennino

Remove -spam-sux to reply.

230. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 15:00:29 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <pLSdndkfy4GTjXHd4p2dnA@comcast.com>
Source record: 92501

"Gary S." <Idontwantspam@net> wrote in message
news:umnne0tujoa5qaljrbs2tv9fd7djlilaho@4ax.com...
> On Wed, 07 Jul 2004 09:15:15 GMT, "nick smith" <NickS@ntlworld.com>
> wrote:
>
> >Need to buy some kit when in the US and am looking for Ham outlets that
will despatch to
> >my relatives out there, or to me here in UK. Can someone please
recommend me some
> >suppliers ?
> >
> Ham Radio Outlet (HRO) http://www.hamradio.com/
>
> Amateur Electronic Supply (AES) http://www.aesham.com/
>
> Texas Towers http://www.texastowers.com/
>
> I am sure there are others, but these three are about the biggest.
>
> My personal experience is only with HRO, as they have a shop about an
> hour's drive from here.
>
> Having it sent to a US address, and then sent to you, might simplify
> things a bit. The first two above will do international orders, TT
> will not.
>
> Happy trails,
> Gary (net.yogi.bear)
> ----------
> at the 51st percentile of ursine intelligence
>
> Gary D. Schwartz, Needham, MA, USA
> Please reply to: garyDOTschwartzATpoboxDOTcom

Check their store locations on the web. Maybe there is one in a city you are
visiting. Unfortunately, NY is not one of them.

Tam/WB2TT

231. Re: looking for used ringo antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 15:29:15 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.07.15.29.15.226556@127.0.0.1>
Source record: 92503

On Tue, 06 Jul 2004 20:11:32 +0000, Jimmie wrote:

>
> "Jimmie" <Gfender@carolina.rr.com> wrote in message
> news:DMzGc.125415$2o2.6386944@twister.southeast.rr.com...
>> [quoted text muted]
> vushcraft
>> [quoted text muted]
> google ringo manual and select the cushcraft site. Probably anough info in
> the installation manual to build one.

possibly. however, they don't offer it in large print or braille. so I am
going to need some help on this one. oh well, I have time.

DE N7ZZT
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

232. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 16:07:19 UTC
From: nick smith <NickS@ntlworld.com>
Message-ID: <XcVGc.11$ql4.9@newsfe5-gui.ntli.net>
Source record: 92502

Just a note to say thanks to all who have replied.....
I'll be phoning around this evening after checking the web sites....

Nick

233. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 17:03:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <918oe0155vpd61knt01k2vcdcaed4usksc@4ax.com>
Source record: 92504

On 7 Jul 2004 02:31:53 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:
>
>RC - The topic became EH Antennas, and I posted "Links"

So long as we both agree you had nothing to contribute but a rather
notorious and noxious example of voodoo antenna design as an
unsuitable response to the original poster.

I see you remain wholly unprepared to actually discuss the pro's or
the con's of the eh design. THIS after all is the purpose of the
group you are posting to.

>RC - When all you have is a single short WHIP Antenna built into your
>'portable' AM/F/Shortwave Radio. A pair of "TV Rabbit Ears" properly
>connected to the radio; may indeed function better as an Antenna.

May indeed - but then you really don't know how well do you? We can
agree you are unsuited for this forum's agenda.

>> For others following the poor quality of discussion surrounding the eh
>> antenna; this design has been field tested, studied and analyzed quite
>> thoroughly on rec.radio.amateur.antenna.
>
>RC - They may wish to also seek an 'alternative' view point

We can both agree they "may" rather seek to go to Disneyland instead.
However this is not rec.radio.tourism nor rec.radio.therapy.
Netiquette demands you post appropriate responses.

>> It is quite an education to
>> simply look at the field data offered by the proponents themselves
>> (who are just as incapable in reading engineering reports as any
>> Yahoo).
>
>RC - Yes as you have 'noted' I am Yahoo.

Of that there has never been any doubt. We both agree you can't read
an engineering report. One can only wonder what point you have to
make beyond tepid repetition of mumbled Te Deums. If you are ignorant
of their own data, I see little purpose to your correspondence here.

>> For the sheer bulk and complexity of the eh design, their own reports
>> shows it to be fully 0.1% to 1% efficient compared to a simple design.
>> Of course, few of you may be capable of erecting this simple design.
>
>RC - For those who wish to seek an 'alternative' view point

We both agree that you have no experience with it yourself to contradict their own reports of its abysmal performance.

>RC - When all you have is a single short WHIP Antenna built into your
>'portable' AM/F/Shortwave Radio. A pair of "TV Rabbit Ears" properly
>connected to the radio; may indeed function better as an Antenna.

At lest we agree you still don't know how much better, and in fact you don't even know if it would be better, do you? You seem wholly disinterested in the discussion of the merit of antennas - shouldn't you take up a hobby that engages you more and participate in their groups?

>> Henceforth we can call these designs Faith-Gain Antennas.

>Faith-Gain Antennas - How They Work... God Only Knows ? ? ?

All can agree you don't.

73's
Richard Clark, KB7QHC

234. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 17:14:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c8boe0pn8e30hjhrgt1f8fdvejjdnr13qq@4ax.com>
Source record: 92505

On Wed, 7 Jul 2004 14:30:08 +0000 (UTC), jimp@specsol-spam-sux.com
wrote:

>OK.
>
>1969, Osan AFB, ROK.
>
>I'm an Army E-5 and go into badge and ID to get a new ID card and plop
>my papers on the counter.
>
>Guy behind the counter gives me and my papers the triple take, gets a
>set of papers of a desk, plops them on the counter and says "This guy
>left 10 minutes ago, what's going on here".
>
>I see a picture of what seems to be me as an Air Force lieutenant.
>
>Same height, weight, color of hair and eyes, same mustache, same first
>and last name, facial features close enough to pass. The only difference
>was our middle initials and Air Force instead of Army.
>
>It took a while to get my ID card...

Hi Jim,

I couldn't help but reflect tangentially on another ID card incident.
This time with the Navy and the head of the Nuclear Navy himself,
Admiral Hyman Rickover. He was a thorn in every side at every level
(but that is how to make an honestly robust and bullet-proof weapons
system unlike star wars).

To test security, he made an ID card with the picture of a monkey on
it and then wandered through secure areas. He was challenged along
the way, and you are to be sure those who simply saluted the uniform
were cashiered. Hymie cut a wide swath through a lot of bases a lot
of brass and congress. The only other figure in DC that was as feared
was J. Edgar Hoover.

73's
Richard Clark, KB7QHC

235. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 17:14:42 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <ohboe0lsr9mi6naq54qrne68iuovg1r9kb@4ax.com>
Source record: 92506

On Wed, 7 Jul 2004 11:00:29 -0400, "Tam/WB2TT" <t-tammaru@c0mca$t.net>
wrote:

>Check their store locations on the web. Maybe there is one in a city you are
>visiting. Unfortunately, NY is not one of them.
>
>Tam/WB2TT
>
Places that do mail order have an incentive to only have retail
locations in no-sales-tax states. If they have a retail location in a
state, they have to charge the sales tax for all mail orders to that
state. That will increase their sales.

For example, Mass has a 5% sales tax on most items. NH has none. Quite
a few companies have nothing in Mass, but retail outlets just over the
border.

Note that NY City has a 3% sales tax on top of the 5% NY State-wide
sales tax.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

236. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 17:56:32 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10eoeafrrm05cb8@corp.supernews.com>
Source record: 92507

In addition to those mentioned by others:

Universal Radio www.rffun.com

R&L Electronics www.randl.com
(I have made one purchse from each of these and had no problems)

I have bought from HRO as well, both by telephone and over the counter
in NH and CO.

HRO has free shipping on most orders over $100. Many others will charge
shipping.

Alan AB2OS

On 07/07/04 05:15 am nick smith put fingers to keyboard and launched the
following message into cyberspace:

> Need to buy some kit when in the US and am looking for Ham outlets that will despatch to
> my relatives out there, or to me here in UK. Can someone please recommend me some
> suppliers ?

237. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 18:12:37 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <40EC3D15.14D4DD8C@uci.edu>
Source record: 92508

Richard Clark wrote:
>
> On 7 Jul 2004 02:31:53 -0700, rhf-newsgroups@pacbell.net (RHF) wrote:
> >
> >RC - The topic became EH Antennas, and I posted "Links"
>
> So long as we both agree you had nothing to contribute but a rather
> notorious and noxious example of voodoo antenna design as an
> unsuitable response to the original poster.
>
> I see you remain wholly unprepared to actually discuss the pro's or
> the con's of the eh design. THIS after all is the purpose of the
> group you are posting to.
>
> >RC - When all you have is a single short WHIP Antenna built into your
> >'portable' AM/F/Shortwave Radio. A pair of "TV Rabbit Ears" properly
> >connected to the radio; may indeed function better as an Antenna.
>
> May indeed - but then you really don't know how well do you? We can
> agree you are unsuited for this forum's agenda.
>
> >> For others following the poor quality of discussion surrounding the eh
> >> antenna; this design has been field tested, studied and analyzed quite
> >> thoroughly on rec.radio.amateur.antenna.
> >
> >RC - They may wish to also seek an 'alternative' view point
>
> We can both agree they "may" rather seek to go to Disneyland instead.
> However this is not rec.radio.tourism nor rec.radio.therapy.
> Netiquette demands you post appropriate responses.
>
> >> It is quite an education to
> >> simply look at the field data offered by the proponents themselves
> >> (who are just as incapable in reading engineering reports as any
> >> Yahoo).
> >
> >RC - Yes as you have 'noted' I am Yahoo.
>
> Of that there has never been any doubt. We both agree you can't read
> an engineering report. One can only wonder what point you have to
> make beyond tepid repetition of mumbled Te Deums. If you are ignorant
> of their own data, I see little purpose to your correspondence here.
>
> >> For the sheer bulk and complexity of the eh design, their own reports

> >> shows it to be fully 0.1% to 1% efficient compared to a simple design.
> >> Of course, few of you may be capable of erecting this simple design.
> >
> >RC - For those who wish to seek an 'alternative' view point
>
> We both agree that you have no experience with it yourself to
> contradict their own reports of its abysmal performance.
>
> >RC - When all you have is a single short WHIP Antenna built into your
> >'portable' AM/F/Shortwave Radio. A pair of "TV Rabbit Ears" properly
> >connected to the radio; may indeed function better as an Antenna.
>
> At lest we agree you still don't know how much better, and in fact you
> don't even know if it would be better, do you? You seem wholly
> disinterested in the discussion of the merit of antennas - shouldn't
> you take up a hobby that engages you more and participate in their
> groups?
>
> >> Henceforth we can call these designs Faith-Gain Antennas.
>
> >Faith-Gain Antennas - How They Work... God Only Knows ? ? ?
>
> All can agree you don't.

All can probably also agree that you seem more interested in your correspondent than in antennas.

jk

238. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 19:35:40 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <cgYGc.41391$IQ4.8565@attbi_s02>
Source record: 92509

Gary S. wrote:

SNIP

> For example, Mass has a 5% sales tax on most items. NH has none. Quite
> a few companies have nothing in Mass, but retail outlets just over the
> border.
>

I'm chuckling <grin>.

Right off of US Route 3 at the NH/Mass state line there is a VERY VERY large shopping mall. One day, about 2 years ago, I was looking for a parking place at that mall and driving everywhere in the parking lot. I had my GPS receiver in the truck. I was totally amazed to find that most of the parking lot is in Mass and the southern most store is just [JUST] over the state line into NH [depending on GPS error about 10 feet into NH]. I judged that the building sidewalk is in Massachusetts and the outside wall is in NH.

BTW, I live in NH.

Deacon Dave, W1MCE

239. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 19:47:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <thkoe0dh34uf1ivsif6ljak9e006dn3bo3@4ax.com>
Source record: 92510

On Wed, 07 Jul 2004 11:12:37 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:
>All can probably also agree that you seem more interested in your
>correspondent than in antennas.

Feeling left out Jim?

What you say is true and I could become interested in you as well as
you don't have much to say about antennas either.

But not very interested, so don't get any false hopes up. Instead,
pick a topic and avoid this soap opera. ;-)

73's
Richard Clark, KB7QHC

240. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 19:59:19 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <75loe0liu009g70m80o5oeq51e7ae6f7f9@4ax.com>
Source record: 92511

On Wed, 07 Jul 2004 19:35:40 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Gary S. wrote:
>
>> For example, Mass has a 5% sales tax on most items. NH has none. Quite
>> a few companies have nothing in Mass, but retail outlets just over the
>> border.
>>
>I'm chuckling <grin>.
>
>Right off of US Route 3 at the NH/Mass state line there is a VERY VERY
>large shopping mall. One day, about 2 years ago, I was looking for a

>NH]. I judged that the building sidewalk is in Massachusetts and the
>outside wall is in NH.
>
When I said "just over the border" I wasn't kidding. ;-)

The town I grew up in was "dry", not allowing any liquor sales. You
could easily identify the borders with the non-dry neighboring towns,
because of the liquor stores. One of them had half its parking in the
dry town, but the door and the cash register clearly in the other
town.

Aren't those arbitrary lines on the map lots of fun?

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

241. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 20:22:40 UTC
From: tdonaly@aol.com
Message-ID: <20040707162240.05775.00000852@mb-m27.aol.com>
Source record: 92512

Jim Kelly wrote,
>
>All can probably also agree that you seem more interested in your
>correspondent than in antennas.
>
>jk
>

That's a cheap shot, but it's a cheap shot worth thinking about. Sometimes
the users's expectations and expertise - or lack thereof - are the deciding
factors
in whether something "works" or not. The EH antenna may work for some people
in the way that homeopathy, brightly colored sugar pills, and other quack
remedies work in medicine, but Richard is right, the technical qualities of
antennas
can't be revealed by testimonials or protestations of faith.
73,
Tom Donaly, KA6RUH

242. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 20:23:46 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10eomuiv78f5fe@corp.supernews.com>
Source record: 92513

I heard recently of a store that straddles a state line (Georgia and ??)
and has the cash register in the state with the lower sales tax (or
perhaps none at all).

Alan AB2OS

On 07/07/04 03:35 pm Dave Shrader put fingers to keyboard and launched
the following message into cyberspace:

>> For example, Mass has a 5% sales tax on most items. NH has none. Quite
>> a few companies have nothing in Mass, but retail outlets just over the
>> border.

> I'm chuckling <grin>.
>
> Right off of US Route 3 at the NH/Mass state line there is a VERY VERY
> large shopping mall. One day, about 2 years ago, I was looking for a
> parking place at that mall and driving everywhere in the parking lot. I
> had my GPS receiver in the truck. I was totally amazed to find that most
> of the parking lot is in Mass and the southern most store is just [JUST]
> over the state line into NH [depending on GPS error about 10 feet into
> NH]. I judged that the building sidewalk is in Massachusetts and the
> outside wall is in NH.
>
> BTW, I live in NH.

243. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 20:38:09 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <40ec5c8d.158161593@news.galilei.com>
Source record: 92514

Hi Rich

I shouldn't probably say this publicly, but it was so many years ago
it probably wouldn't matter today anyhow.

A was working for company that worked under government contracts, we
all had ID badges of course.
Because of my and other co-workers clearance level, we had badges that
without close examination looked like the upper echelon of a
department we had to walk through a few times.
This caused all the workers in that department to begin working hog
wild until we had passed through.
But that's not the funniest part. Each of us in the team I was in had
black dot security clearance as well, which just appears to the eye as
a black dot on our badges.
A few of the upper echelon of the other department wanted to follow us
so they conveniently placed a simple black dot on their badges and
tailed in a secure area with us as part of the group.
No sooner than the doors behind us shut, the security doors in the
hallway slammed shut as well and we were all trapped like rats in a
maze until security came and hauled those not of our group away.
Every single one of them got the axe, even though they were part of
the upper echelon.
We too got into trouble as being the group that held the door open for
them to come in, which was a bummer. But our trouble was just a 2
hour long lecture (on the clock).
This was way back in the 60's and security monitoring equipment was
quite advanced back then. I hate to think of what it is today!

TTUL
Gary

244. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 20:42:07 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <40ec5e62.158630343@news.galilei.com>
Source record: 92515

"Radio Man" <puns@verizon.net> verbositized:

>This is called "Synchronicity"-----Meaningful coincidence.
>There is a yahoo group that discusses this

Hey, thanks Radio Man!

I had never heard that word before.
See, one learns something new everyday.

Over 150 people showed up at a funeral home for my uncles funeral.
Only thing was, my uncle was very much alive.
With a name like ours, you don't see too many duplicates, hi hi.....
So when the Obit appeared in the paper, folks just assumed it was my
uncle and donned their Sunday best and headed off for the funeral
parlor.
He really ENJOYED all of his friends calling him up to express their
condolences and he was the one answering the phone.

TTUL
Gary

245. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 20:54:41 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <40EC6311.6D3B016B@uci.edu>
Source record: 92516

Richard Clark wrote:
>
> On Wed, 07 Jul 2004 11:12:37 -0700, Jim Kelley <jwkelley@uci.edu>
> wrote:
> >All can probably also agree that you seem more interested in your
> >correspondent than in antennas.
>
> Feeling left out Jim?

I'm feeling out left......here in SoCal. :-)

> What you say is true and I could become interested in you as well as
> you don't have much to say about antennas either.

I'll wager I have less to say than you do on just about any subject.
:-)

> But not very interested, so don't get any false hopes up. Instead,
> pick a topic and avoid this soap opera. ;-)

Roger. In fact, I was trying to encourage you to avoid them!

73, jk

246. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 21:01:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <plooe014of8hlhi26cs7lc960db7e4v5vd@4ax.com>
Source record: 92517

On 07 Jul 2004 16:38:09 EDT, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>This was way back in the 60's and security monitoring equipment was
>quite advanced back then. I hate to think of what it is today!

Hi Gary,

Unfortunately, the top team in power has lost ground in that regard. The following clip (very much like your story, sans the concern) is from "The American Conservative":

==========

In early winter, an incident occurred that was seared into my memory. A coworker and I were suddenly directed to go down to the Mall entrance to pick up some Israeli generals. Post-9/11 rules required one escort for every three visitors, and there were six or seven of them waiting. The Navy lieutenant commander and I hustled down. Before we could apologize for the delay, the leader of the pack surged ahead, his colleagues in close formation, leaving us to double-time behind the group as they sped to Undersecretary Feithï¿½s office on the fourth floor. Two thoughts crossed our minds: are we following close enough to get credit for escorting them, and do they really know where they are going? We did get credit, and they did know. Once in Feithï¿½s waiting room, the leader continued at speed to Feithï¿½s closed door. An alert secretary saw this coming and had leapt from her desk to block the door. "Mr. Feith has a visitor. It will only be a few more minutes." The leader craned his neck to look around the secretaryï¿½s head as he demanded, "Who is in there with him?"

This minor crisis of curiosity past, I noticed the security sign-in roster. Our habit, up until a few weeks before this incident, was not to sign in senior visitors like ambassadors. But about once a year, the security inspectors send out a warning letter that they were coming to inspect records. As a result, sign-in rosters were laid out, visible and used. I knew this because in the previous two weeks I watched this explanation being awkwardly presented to several North African ambassadors as they signed in for the first time and wondered why and why now. Given all this and seeing the sign-in roster, I asked the secretary, "Do you want these guys to sign in?" She raised her hands, both palms toward me, and waved frantically as she shook her head. "No, no, no, it is not necessary, not at all." Her body language told me I had committed a faux pas for even asking the question.

=========

This is of course entirely consistent with a DoD that sold the contract to build super secret Nuclear Sub propellers to a foreign outfit that immediately turned the design over to the Chinese. We have also commissioned the work for Immigration security to an offshore company completely acing out two American companies with a long track record in this business.

73's
Richard Clark, KB7QHC

247. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 21:05:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dapoe0h0l4pi0tm282v41rs8u3bfmsqa8m@4ax.com>
Source record: 92518

On Wed, 07 Jul 2004 13:54:41 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:
>Roger. In fact, I was trying to encourage you to avoid them!

Hi Jim,

Good advice.

73's
Richard Clark, KB7QHC

248. Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 21:44:58 UTC
From: Albert <pass@pass.com>
Message-ID: <naroe09keqg40lrppgk4vdbbl2jh3opa6i@4ax.com>
Source record: 92519

I'd like to put up a 40 to 60 wavelength (per leg) vee beam for 144 Mhz. It would be 12 feet off the ground and unterminated. My hope is that the angle between the wires can be smaller than normal becasue the legs are relatively long.

How much gain (dbd) should I expect and about what take off angle will I have?

It will be for transmitting only. With the transmitter located at the feedpoint, is there any need for exotic feed methods?

What type of matching do I need to feed it with a 50 ohm output solid state power amp?

Thanks,

Art

KY1K at pivot dot net

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

249. Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 22:23:47 UTC
From: Tainted <scamp@org.org>
Message-ID: <totoe0h42qbfuupgactpnu44rg81ptpila@4ax.com>
Source record: 92520

Anyone know how many ohms I should be measuring at the end of a 25ft coax cable connected to a 60ft Delta antenna? Right at the 529 connection at the connection end of the antenna the resistance is infinite. But at the bottom of 25ft of coax feeder the resistance is about 5meg ohms. Does that sound right? Also, if I measure the coax at the antenna (not connected to the antenna (just going 25ft to radio) it measures infinite. Don't understand it. Does it have anything to do with my ground maybe?

250. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 22:35:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i9uoe0tu6o0dva2maok4j3k8h37t5gmeut@4ax.com>
Source record: 92521

On Wed, 07 Jul 2004 17:44:58 -0400, Albert <pass@pass.com> wrote:

>I'd like to put up a 40 to 60 wavelength (per leg) vee beam for 144
>Mhz. It would be 12 feet off the ground and unterminated.
...
>What type of matching do I need to feed it with a 50 ohm output solid
>state power amp?

Hi Art,

Too many details lacking. 40 to 60 covers too much turf (beyond the pun), you neglect how wide it will be at the ends too. I ran a couple of tests to see the gain from 17 to 22dBi and the Z anywhere from 200 Ohms to 2000 Ohms. One thing to consider is the "law of diminishing returns." The gain for a much smaller V is not much different from the giant one (think 3dB for each doubling - as a shorthand, I am sure this fails long before the 20, much less 50th, wavelength is reached).

73's
Richard Clark, KB7QHC

251. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 23:01:48 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <msadnfPwoJRGHXHd4p2dnA@adelphia.com>
Source record: 92522

Tdonaly wrote:

> Jim Kelly wrote,
>
>>All can probably also agree that you seem more interested in your
>>correspondent than in antennas.
>>
>>jk
>>
>
>
> That's a cheap shot, but it's a cheap shot worth thinking about. Sometimes
> the users's expectations and expertise - or lack thereof - are the deciding
> factors
> in whether something "works" or not. The EH antenna may work for some people
> in the way that homeopathy, brightly colored sugar pills, and other quack
> remedies work in medicine, but Richard is right, the technical qualities of
> antennas
> can't be revealed by testimonials or protestations of faith.

I read a couple pdf's on the things where a couple hams tested 20 meter backpacker against a dipole.

When the test signals were coupled with a very short length of coax to the antenna, the EH didn't perform well at all. When coupled with a 1 wave length of coax, the feedline radiated, but not very efficiently, around 1% as efficiently as the dipole, IIRC. Forgive the numerical blunders, it was late, and I might have slipped a number or two! 8^)

A long coax version fared better against a vertical in a second test, but in all fairness, the vertical had a pretty lousy ground.

But okay, the thing worked. The authors concluded that what they had was a tuned circuit on the end of some coax, and the coax radiated more so than the antenna. This sounds almost like aa halfwave antenna with it's tuned circuit. Any relation there?

All in all, it sure seems like a lot of trouble for a so-so antenna, and since I don't particularly like RF burns and radiating coax, I think I'll pass! 8^)

- Mike KB3EIA -

252. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 23:15:38 UTC
From: jgboyles@aol.com
Message-ID: <20040707191538.05710.00001254@mb-m14.aol.com>
Source record: 92523

>Anyone know how many ohms I should be measuring at the end of a 25ft
>coax cable connected to a 60ft Delta antenna?

Near zero. As I understand a Delta, or Delta Loop antenna, the DC resistance should be zero ohms. The Delta is a closed loop. Down at the end of your coax the DC resistance will be zero from center conductor to shield. Probably need to disconnect the the coax from the antenna and check them seperately to insure the coax is not shorted, and the antenna reads a short.

>Right at the 529 connection at the connection end of the antenna the
resistance is infinite.
Not sure about a 529 connection, but if you take the ohm readings with the antenna disconnected from the coax, you should find the problem.

73 Gary N4AST

253. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 23:16:36 UTC
From: Albert <pass@pass.com>
Message-ID: <2h0pe09occusf3t8168jebjbiedag5g29a@4ax.com>
Source record: 92524

OK, thanks Richard.

How about this.

30 wavelengths per side, average conducting ground, 12 feet above ground.

What angle do I need for best forward gain, what will the takeoff angle be at that angle?

If I can get the entire antenna up to 20 feet above ground, how much better is the performance?

Is there any way for me to do modelling myself without burdening you or someone with a modeling program? I am not aware of free software that will model rhombics or vee's.

Thanks,

Art

ky1k at pivot dot net

PS: Some additional info. This is for EME, which does not require much movement. Since it is so long, it won't be variable in the elevation angle anyway. But, I hope to move one wire a bit so I can steer the beam to the left or to the right a little (changing the angle of the vee at the same time).

>Hi Art,
>
>Too many details lacking. 40 to 60 covers too much turf (beyond the
>pun), you neglect how wide it will be at the ends too. I ran a couple
>of tests to see the gain from 17 to 22dBi and the Z anywhere from 200
>Ohms to 2000 Ohms. One thing to consider is the "law of diminishing
>returns." The gain for a much smaller V is not much different from
>the giant one (think 3dB for each doubling - as a shorthand, I am sure
>this fails long before the 20, much less 50th, wavelength is reached).
>
>73's
>Richard Clark, KB7QHC

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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254. Re: F911 sure make that dumb hayseed Bush look stupid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 23:23:50 UTC
From: hillbilly3302 <davesradio@alltel.net>
Message-ID: <dD%Gc.69$WS.29@fe39.usenetserver.com>
Source record: 92525

```
good, didn't like them anyway

--
dave

"fre" <fre@mon.com> wrote in message news:ccbuee31nf9@enews3.newsguy.com...
> Cecil Moore wrote:
>
> > cva wrote:
> >
> >> Osama is a better human being than George Bush.
> >
> >
> > By what objective standard?
> >
> >
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> > ------== Over 100,000 Newsgroups - 19 Different Servers! =-----
>
> Bush has killed more innocent Iraqi's than bin laden has killed Americans.
```

255. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 23:43:52 UTC
From: jgboyles@aol.com
Message-ID: <20040707194352.05710.00001255@mb-m14.aol.com>
Source record: 92526

>But okay, the thing worked. The authors concluded that what they had
>was a tuned circuit on the end of some coax, and the coax radiated more
>so than the antenna. This sounds almost like aa halfwave antenna with
>it's tuned circuit.

The problem with the EH and CFA as has been pointed out many times is the claim to provide Electromagnetic radiation through Poynting Vector Synthesis. They produce the E and H field seperately and combine the two in the antenna to produce EM radiation. The claim is with this Synthesis, high radiation efficiency is produced from a very small antenna, the Holy Grail, a small efficient antenna.
If someone gets results from one of these antennas, it is due to feedline radiation, so they will proclaim "it works". But it does not work because of Poynting Vector Synthesis as claimed. There are a number of ways to get your feedline to radiate, the EH antenna could be one of the better ones, along with the commercial Bilal Isotron.

73 Gary N4AST

256. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-07 23:45:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vh1pe0d5u4805df92s0nsud68trtsdft0p@4ax.com>
Source record: 92527

On Wed, 07 Jul 2004 19:16:36 -0400, Albert <pass@pass.com> wrote:

>OK, thanks Richard.
>
>How about this.
>
>30 wavelengths per side, average conducting ground, 12 feet above
>ground.

You still don't say how far apart the tips are.

>What angle do I need for best forward gain, what will the takeoff
>angle be at that angle?

The angles were pretty consistant at 5 degrees at 12 feet up. Gain
did not vary much either (5dB is a lot perhaps, but then there are so
many variables to consider).

>If I can get the entire antenna up to 20 feet above ground, how much
>better is the performance?

Height change up doesn't seem to be signficant.

>Is there any way for me to do modelling myself without burdening you
>or someone with a modeling program? I am not aware of free software
>that will model rhombics or vee's.
>
>Thanks,
>
>Art

Hi Art,

With monster size antennas and a desire for accuracy, this drives the
model towards a lot of segments ($$$). You could use the free version
of EZNEC but it will blow up.

EME hmmm? Major lobe is 5 degrees off the horizon and 5 degrees wide.
Isn't there a problem with an antenna looking at the moon so close to
the horizon (ground temperature)? Also, the moon will only fill that
box for, what, 15 minutes?

You might find it simpler to build an array of dipoles such that they
were all looking up at the same box. Combining them may be a bitch
however, so I can see your desire for simplicity here.

73's
Richard Clark, KB7QHC

257. Re: Help newbie with Channel Master 9512 Rotor - homebrew controller ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 00:11:42 UTC
From: "K. Hastings" <myfamilydotcom@hotmail.com>
Message-ID: <2j0Hc.70634$Np3.3385818@ursa-nb00s0.nbnet.nb.ca>
Source record: 92528

Thanks to all for your help on this - especially to Crazy George who correctly suggested that the 2 directions are accomplished "typically a split phase AC motor, a common and one phase fed directly, the other through a phase shifting capacitor in the controller. Swap the two phase leads for reverse direction." This is exactly what this older rotor used.

Thanks to G.Beat I have excellent drawings of the rotor mods and clear schematics that I can use to build a revised controiller module. I'll post schematics when my experimentation is complete if others are interested.

Thanks again, Kevin VE9 XYZ

"K. Hastings" <myfamilydotcom@hotmail.com> wrote in message news:EATCc.63777$Np3.2980746@ursa-nb00s0.nbnet.nb.ca...
> I'm fixing up an older Channel Master light-duty rotor to turn a small 2m
> wooden quad I've built for my attic, but one of the plastic gears in the
> control unit disintegrated in my hand during the rennovation. The rest of
> the control unit is in rough shape too.
>
> I'm thinking of building my own power supply/control unit for this rotor,
> but I'm not clear on just how these 3-wire units actually control the rotor.
> Any ideas? I can perhaps make my own simple PS, and figure out the
> direction-setting power scheme, but getting feedback on the antenna position
> to prevent over-turn cound be tricky.
>
> Thanks to all who reply...
>
> VE9XYZ Kevin
>
>

258. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 00:14:03 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40ec91cc$0$4719$39cecf19@news.twtelecom.net>
Source record: 92529

Art

Which brand of EME is this for? If for one of the new digital modes, you don't need that much gain, as you may already know. If it's for CW, having a ton of gain in one direction only gives you a very seldom available and very short window.

You would be better off sticking up about 15dBd of rotatable gain and making a horizon sched with W5UN. The 2m EME net is on 14.345 at 11AM central saturdays and sundays. Net control is VE7BQH. Dave, W5UN, is almost always on.

Dave also does the digi EME modes, and as a guess could probably work you on something like 10dBd with 100W on one of those.

I know Ian is an EME're, so pipe in, Ian!

tom
K0TAR

Albert wrote:

> OK, thanks Richard.
>
> How about this.
>
> 30 wavelengths per side, average conducting ground, 12 feet above
> ground.
>
> What angle do I need for best forward gain, what will the takeoff
> angle be at that angle?
>
> If I can get the entire antenna up to 20 feet above ground, how much
> better is the performance?
>
> Is there any way for me to do modelling myself without burdening you
> or someone with a modeling program? I am not aware of free software
> that will model rhombics or vee's.
>
> Thanks,
>
> Art
>
> ky1k at pivot dot net
>
> PS: Some additional info. This is for EME, which does not require much

> movement. Since it is so long, it won't be variable in the elevation
> angle anyway. But, I hope to move one wire a bit so I can steer the
> beam to the left or to the right a little (changing the angle of the
> vee at the same time).
>
>
>

259. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 00:43:15 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <nP2dnQ2Gs74-BXHd4p2dnA@adelphia.com>
Source record: 92530

JGBOYLES wrote:

>>But okay, the thing worked. The authors concluded that what they had
>>was a tuned circuit on the end of some coax, and the coax radiated more
>>so than the antenna. This sounds almost like aa halfwave antenna with
>>it's tuned circuit.
>
>
> The problem with the EH and CFA as has been pointed out many times is the
> claim to provide Electromagnetic radiation through Poynting Vector Synthesis.
> They produce the E and H field seperately and combine the two in the antenna to
> produce EM radiation. The claim is with this Synthesis, high radiation
> efficiency is produced from a very small antenna, the Holy Grail, a small
> efficient antenna.

Hmm, maybe Occam's razor should be invoked?

> If someone gets results from one of these antennas, it is due to feedline
> radiation, so they will proclaim "it works". But it does not work because of
> Poynting Vector Synthesis as claimed. There are a number of ways to get your
> feedline to radiate, the EH antenna could be one of the better ones, along with
> the commercial Bilal Isotron.

At least the Isotrons are kinda cool looking... 8^)

- Mike KB3EIA -

260. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 01:17:08 UTC
From: Tainted <scamp@org.org>
Message-ID: <1u7pe0hvr7148rl1tk326cd9sragql85n9@4ax.com>
Source record: 92532

On 07 Jul 2004 23:15:38 GMT, jgboyles@aol.com (JGBOYLES) wrote:

>>Anyone know how many ohms I should be measuring at the end of a 25ft
>>coax cable connected to a 60ft Delta antenna?
>
>Near zero. As I understand a Delta, or Delta Loop antenna, the DC resistance
>should be zero ohms. The Delta is a closed loop. Down at the end of your coax
>the DC resistance will be zero from center conductor to shield. Probably need
>to disconnect the the coax from the antenna and check them seperately to insure
>the coax is not shorted, and the antenna reads a short.
>
>>Right at the 529 connection at the connection end of the antenna the
>resistance is infinite.
> Not sure about a 529 connection, but if you take the ohm readings with the
>antenna disconnected from the coax, you should find the problem.
>
>
>73 Gary N4AST

Appreciate the help but it's not a closed loop. At least I don't
think so. There are two antenna lines - ones 60ft and the other 16ft.
They are connected to the 529 center post. The ground lead (30ft) is
connected to the outer part of the 529. I'm pretty sure it's right
that there is infinite ohms there because they are not physically
touching in any way. I'm confused because simply adding 25ft of coax
causes a 2.5meg ohm reading. In essence I'm still across the 529 just
25ft further away. So nothing should change.

261. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 01:24:47 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <zn1Hc.20$Qj.6@lakeread01>
Source record: 92531

"Richard Clark" <kb7qhc@comcast.net> wrote
> Admiral Hyman Rickover. He was a thorn in every side at every level
> (but that is how to make an honestly robust and bullet-proof weapons
> system unlike star wars).

Hi Richard -

Luckily, Rickover was never part of a weapons system. Or else, in addition to driving a submarine that was too heavy, too slow, and could not dive as deep as the enemy because of his assanine demands on the nuke plant, we would have also had torpedoes that were slower than the enemy that was hunting us. Bad enough that they dove deeper ran faster and had torpedoes faster than we were. I once had some twit Canadian who was visiting across Lake Erie when I was home on leave, tell me that the U.S. simply out-spent the Soviets in the Cold War.. That jerk-off would never know the harrowing times that we were nearly rammed by packs of faster boats that could sweep an area at nearly twice our top speed. They would race, stop listen, charge another direction, stop listen, etc. We out-trained and out-manuevered that dedicated adversary, and anybody that thinks differently reads too many novels..

Also, the Chinese never got our propellers, and it wouldn't matter if they did then or now. It was the Soviets that bought the ballbearing technology for sound silencing from Toshiba - who violated their contract by "sharing" it.

Best regards,

Jack

262. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 01:32:16 UTC
From: NN7K - Jim <nn7kexk7zfgnospam@sbcglobal.net>
Message-ID: <Au1Hc.12524$WF6.2216@newssvr27.news.prodigy.com>
Source record: 92533

And, same thing on West Coast! Go to Lake Tahoe, California- Nevada
border- Parking, and hotel in California- Casino (illegal in Cal) on
Nevada side of border, or Gold Ranch , 1 mile inside Nevada, on I-80,
tho the way the state line runs, 100 feet in back of this casino,
California Lottery tickets (illegal in Nevada, no lottery) for sale! ,
and with the crazy quilt of laws (no sales tax in Oregon), and no Income
tax in Nevada, nor Washington, well, I'll leave it to your immagination
the consequences !
Other breaks also abound on Indian Reservations (cheap cigarettes, and
other items)! As stated, isn't border hopping FUN ??? Jim NN7K

Dave Shrader wrote:
> Gary S. wrote:
>
> SNIP
>
>> For example, Mass has a 5% sales tax on most items. NH has none. Quite
>> a few companies have nothing in Mass, but retail outlets just over the
>> border.
>>
>
> I'm chuckling <grin>.
>
> Right off of US Route 3 at the NH/Mass state line there is a VERY VERY
> large shopping mall. One day, about 2 years ago, I was looking for a
> parking place at that mall and driving everywhere in the parking lot. I
> had my GPS receiver in the truck. I was totally amazed to find that most
> of the parking lot is in Mass and the southern most store is just [JUST]
> over the state line into NH [depending on GPS error about 10 feet into
> NH]. I judged that the building sidewalk is in Massachusetts and the
> outside wall is in NH.
>
> BTW, I live in NH.
>
> Deacon Dave, W1MCE
>

263. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 02:27:36 UTC
From: Albert <pass@pass.com>
Message-ID: <b1cpe0hjetk7kena1nblahknujnrlb1dlt@4ax.com>
Source record: 92534

>
>You still don't say how far apart the tips are.
>
>>What angle do I need for best forward gain, what will the takeoff
>>angle be at that angle?
>
>

Hi Richard,

When I asked 'what angle do I need for best forward gain', I was
hoping you could give me an idea what the optimum distance between the
tips was.

My hope was that longer legs might allow me to use smaller angles
although I have a big field to play in.

Thanks,

A

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264. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 02:40:24 UTC
From: Albert <pass@pass.com>
Message-ID: <s9cpe0pkmnvl6q0ah9l1qvt5mt04qj16vj@4ax.com>
Source record: 92535

On Wed, 07 Jul 2004 19:14:03 -0500, Tom Ring <news0000@taring.org>
wrote:

>Art
>
>Which brand of EME is this for? If for one of the new digital modes,
>you don't need that much gain, as you may already know. If it's for CW,
>having a ton of gain in one direction only gives you a very seldom
>available and very short window.
>

Thanks for the eme advice.

But, I was asking about the gain of a vee beam because they are cheap
to build and easy to put back up when the weather takes them out. We
have major ice storms often here.

Which "Brand of eme' is irreleveant, gain is gain regardless of which
mode is used. Excess gain is never wasted, it either makes the QSO
faster or allows one to work smaller stations or allows SSB instead of
CW/digital modes.

If the angle of the V makes little difference to the actaul gain, it
can be steered by moving either leg, which is also easy to do.

Although I can only work on my moon rise or moon set, more gain is
always better. Since I can't elevate my yagi, a non elevatable vee
beam for transmit only might give higher gain. The yagi would be for
receive only.

Having different receive and transmit antennas has benefits as well,
such as no switching loss and no need to protect my gaasfet during
transmit.

Can you offer any suggestions regarding the original question?

Thanks

A

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265. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 02:49:45 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <d4dpe0llri941hqmg3pgcb653l5gq9e3eg@4ax.com>
Source record: 92536

On Thu, 08 Jul 2004 01:32:16 GMT, NN7K - Jim
<nn7kexk7zfgnospam@sbcglobal.net> wrote:

>Other breaks also abound on Indian Reservations (cheap cigarettes, and
>other items)! As stated, isn't border hopping FUN ??? Jim NN7K
>
One time, a few years back, there was an elderly farmer living in
western Maine, near the New Hampshire border.

One day, a crew of surveyors from the state came by the area. They did
all of their sightings and measurements and calculations, and then one
of them went up to the farmhouse.

He asked the farmer how long he had lived there, and the farmer
replied, "80 years, next November, I've lived on this farm here in
Maine since I was born."

He told the farmer, "we've just checked, and the state border was
marked in the wrong place. Your farm is actually in New Hampshire."

The farmer said, " Good thing, too. Don't think I could have taken
another one of those Maine winters."

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

266. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 03:45:26 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40ecc449$1_2@corp.newsgroups.com>
Source record: 92537

Tainted wrote:
> Anyone know how many ohms I should be measuring at the end of a 25ft
> coax cable connected to a 60ft Delta antenna?

DC? or RF?

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267. Yaesu Rotor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 03:53:12 UTC
From: Topaz305RK <2smoore@nemontel.net>
Message-ID: <96udnZaJgJoPWHHdRVn-uw@vnet-inc.com>
Source record: 92538

Anyone know of a rotor repair service, other than Yaesu, for the G-800SDX rotor. Have a unit in need of repair and after much searching have come up with nothing. Checked all the old favorites, Norms, Rotor Doctor (CATS), etc., none mention the Yaesu line of rotors.

Any help would be greatly appreciated.

--
K7SAM
Sam Moore
Transmitting from Navajo, MT
Center of the Known Universe

268. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 04:18:56 UTC
From: Tainted <scamp@org.org>
Message-ID: <7pipe0dqrldp9q9fj11g5cp9iv5ggr1jui@4ax.com>
Source record: 92539

On Wed, 07 Jul 2004 22:45:26 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Tainted wrote:
>> Anyone know how many ohms I should be measuring at the end of a 25ft
>> coax cable connected to a 60ft Delta antenna?
>
>DC? or RF?
>
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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DC

269. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 07:43:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3jtpe01dc6tngvb87cqfb6e70kjmahesdg@4ax.com>
Source record: 92540

On Wed, 07 Jul 2004 22:27:36 -0400, Albert <pass@pass.com> wrote:
>When I asked 'what angle do I need for best forward gain', I was
>hoping you could give me an idea what the optimum distance between the
>tips was.
>
>My hope was that longer legs might allow me to use smaller angles
>although I have a big field to play in.

Hi Al,

Well, I don't do things by half, so I am building a matrix and decided to start with a 10 Wavelength V antenna located 5 Wavelengths above ground. In this case, the Wavelength corresponded to 2M (ï¿½) over typical ground using #14 wire from local hardware store. I varied the opening angle by increments of 10ï¿½ and observed that the feedpoint Z increased over most of this interval, and then declined. With an opening angle of 5ï¿½, it presented a near 1:1 match but with a gain at the lower end of the series: 9dBi @ 15ï¿½.

20ï¿½ opening angle offered both the best gain, 13.3 @10ï¿½, and a match to 90Ohms.

This pretty much represents the spread of gain values, the match values continued to increase in R to as high as 160 Ohms with gain varying between the two values already described at 10 or 15 degrees elevation. The highest gain azimuth was not always apparent against the V geometry. That is to say, it did not aim down the barrel.

Perhaps more reports later. However, as projects go, I am still working on the Lattin antenna others have described an interest in, and I have combined that with the Franklin antenna as part of a wide ranging survey of transmission line-like antenna designs.

73's
Richard Clark, KB7QHC

270. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 07:45:52 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <CUrMYHGwuP7AFAiT@ifwtech.co.uk>
Source record: 92541

Tom Ring wrote:
>Art
>
>Which brand of EME is this for? If for one of the new digital modes,
>you don't need that much gain, as you may already know. If it's for
>CW, having a ton of gain in one direction only gives you a very seldom
>available and very short window.
>
>You would be better off sticking up about 15dBd of rotatable gain and
>making a horizon sched with W5UN. The 2m EME net is on 14.345 at 11AM
>central saturdays and sundays. Net control is VE7BQH. Dave, W5UN, is
>almost always on.
>
>Dave also does the digi EME modes, and as a guess could probably work
>you on something like 10dBd with 100W on one of those.
>
>I know Ian is an EME're, so pipe in, Ian!
>

(Still sleepy and jet-lagged...)

By coincidence, I was involved in just that kind of thing in 1979(?) when we made the very first 2m EME QSOs from G-land using amateur antennas at both ends of the path. One of our group was a farmer's son, so we were able to string a 600ft rhombic over a large field of pigs.

The quick answer about feeding a very long V-beam on 2m is to use a "universal stub" - a half-wave open-wire stub with a shorting bar, and a 4:1 coax balun. Adjust the tapping points for the shorting bar and balun to get a good impedance match, and away you go. The universal stub is almost a lost art, but any *old* VHF handbook will show you how to make one.

It's obviously much more convenient if you come down to ground level in high-grade open-wire feeder - not the store-bought stuff, but home-made, with close-spaced wires under tension and a minimum of insulators. You can then do the matching at ground level.

30 wavelengths per leg should be long enough to eliminate any termination requirements at the far end. Radiation "loss" from the forward-travelling wave will automatically ensure that the rear lobe is reduced. If you wish, you can terminate the far end of each leg with a 300R low-inductive resistor and two quarter-wave "radials" in a T configuration... but you'll probably not notice the difference.

However, it's true that:
>having a ton of gain in one direction only gives you a very seldom
>available and very short window.
>
This is a major inconvenience - you get maybe 20 minutes total operating time per day, on maybe 3-4 days per month maximum. And that's only if the direction of the beam is perfectly optimized. You need to lay out the antenna with an accuracy of about 1 degree maximum, so you'll need to borrow some serious surveying equipment. Guess-and-compass methods will not work, because even small azimuth errors could mean that you're operating on completely the wrong DAY!

(As the one who did the calculations, I can still remember the feeling of relief on verifying that the moon really did set in front of the rhombic, and on the right day too.)

Also, these moonrise or moonset windows will occur at arbitrary times of day or night. With absolutely no time to waste, you will be limited to making skeds... and not many sked partners may want to share that inconvenience with you.

Overall, I agree with Tom - a large fixed antenna was the right thing to do 20+ years ago, but 2m EME is now in a very different place.

A smaller steerable beam will trade raw gain for a huge increase in EME operating *time*, and with modern operating techniques, time is what you need the most.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

271. Re: Yaesu Rotor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 10:52:40 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <YH9Hc.42473$MB3.3617@attbi_s04>
Source record: 92542

"Topaz305RK" <2smoore@nemontel.net> wrote in message
news:96udnZaJgJoPWHHdRVn-uw@vnet-inc.com...
> Anyone know of a rotor repair service, other than Yaesu, for the G-800SDX
> rotor. Have a unit in need of repair and after much searching have come up
> with nothing. Checked all the old favorites, Norms, Rotor Doctor (CATS),
> etc., none mention the Yaesu line of rotors.
>
> Any help would be greatly appreciated.
>
>
> --
> K7SAM
> Sam Moore
> Transmitting from Navajo, MT
> Center of the Known Universe
>

Sam -

If you don't send it to Yaesu for service - it is up to you to repair.

Some web pages have information on minor repairs (e.g. ball bearing
replacement) --
BUT the limited availability of some parts (e.g. only from Far East if Yaesu
USA does not have part in stock) -
limits options. Norm's Rotor Service was recently purchased from original
owner (MD) and moved to Alabama.

w9gb

272. Re: US Mail order ham outlets ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 10:54:55 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <3K9Hc.42668$a24.19966@attbi_s03>
Source record: 92543

"nick smith" <NickS@ntlworld.com> wrote in message
news:DaPGc.21$oj1.0@newsfe4-gui.ntli.net...
> Need to buy some kit when in the US and am looking for Ham outlets that
> will despatch to
> my relatives out there, or to me here in UK. Can someone please
> recommend me some
> suppliers ?
>
> Thanks,
>
> Nick
>
Amateur Electronic Supply (AES) http://www.aesham.com/
The Orlando store routinely ships to Central and South America -
the store is just north of the Orlando municipal airport (private aircraft).

gb

273. sell

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 11:55:17 UTC
From: Carl Domanico <vze2686b@verizon.net>
Message-ID: <FCaHc.42974$MT5.11956@nwrdny01.gnilink.net>
Source record: 92544

Hi I have a Kenwood TM-741A Tri-Band Mobile Radio

It Has The 144 mhz Module and the 440 mhz Module Installed..The 144 mhz module is not functioning...The 440 mhz works fine and so does the rest of the radio...complete with owner/ operator manual...

Make offer...

Carl

N2MFW

274. MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 13:03:35 UTC
From: vandmand <vandmand@loveletters.dk>
Message-ID: <40ed387e$0$176$edfadb0f@dread11.news.tele.dk>
Source record: 92545

I have just started to use my new MFJ 1876 located om my balcony.
Before the antenna went into operartion the motor unit has to be replaced.
:-(
However, my problem is that the antenna will not tune in the frequency area
10.1 - 18 MHz.
On higher band there is no problem.
I known that the loaction on my balcony is not ideal but i don�t think thats
the problem or?
Any ideas??
Best regards
OZ1JZV - John

275. Re: Yaesu Rotor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 13:24:16 UTC
From: wb4una@aol.com
Message-ID: <20040708092416.04264.00001154@mb-m15.aol.com>
Source record: 92546

I have taken a couple of them apart and they look like they were copied from the old HD-73 rotors...I have replaced the brake disc with the 73 rotors and all worked ok......i just never liked a rotor that used a piece of sand paper to hold a rotor in place...

Randy

ARS: WB4UNA
Randy Chavis
247 Goff Court
West Columbia
S.C. 29172

276. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 13:33:45 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <5uCdnbfew9KI0HDdRVn-hw@comcast.com>
Source record: 92547

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:3jtpe01dc6tngvb87cqfb6e70kjmahesdg@4ax.com...
> On Wed, 07 Jul 2004 22:27:36 -0400, Albert <pass@pass.com> wrote:
> >When I asked 'what angle do I need for best forward gain', I was
> >hoping you could give me an idea what the optimum distance between the
> >tips was.
> >
> >My hope was that longer legs might allow me to use smaller angles
> >although I have a big field to play in.
>
> Hi Al,
>
> Well, I don't do things by half, so I am building a matrix and decided
> to start with a 10 Wavelength V antenna located 5 Wavelengths above
> ground. In this case, the Wavelength corresponded to 2M (�) over
> typical ground using #14 wire from local hardware store. I varied the
> opening angle by increments of 10� and observed that the feedpoint Z
> increased over most of this interval, and then declined. With an
> opening angle of 5�, it presented a near 1:1 match but with a gain at
> the lower end of the series: 9dBi @ 15�.
>
> 20� opening angle offered both the best gain, 13.3 @10�, and a match
> to 90Ohms.....

Hi Richard,
How about shooting for 112 Ohms, so he can match it with a 1/4 wave section
of RG11.

Tam/WB2TT

277. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 14:00:00 UTC
From: Albert <pass@pass.com>
Message-ID: <43kqe0p095isqcfni21vcdmkeke4gd5q32@4ax.com>
Source record: 92548

Hi Ian,

Thanks for your comments.

My hope was to use a v beam instead of a rhombic.

The V is relatively easy to steer, especially if the performance doesn't change much if either leg is moved. Note that I hope to leave one leg of the beam fixed and steer the az by varying the position (and the V angle) of the other leg. Not sure how much changing the angle of the V impacts the performance, which is why I asked for someone with modeling software.

My hope was to exploit the high gain, simple construction (but poor receive) of the V for transmit only and to use the modest sized FO yagi for receive only.

If I can get 19 or 20 db from a big V beam, I can probably tollerate the limited operating time as well, Q's with big guns should take only minutes and medium sized stations should be workable in a 20 minute window.

If the computer model predicts a usable gain, I'd like to try putting one up.

Regards,

Art

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

278. Re: Mechanical Help needed on 32 foot vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 14:22:28 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <FMcHc.88$TT2.33@fed1read01>
Source record: 92549

Many thanks for the responses to my query. Found a 22 foot fiberglass Flag pole on E-bay. That plus 10 foot of aluminum mast should do the trick. And guy ropes are in order as suggested.

--
Lamont Cranston

The Shadow Knows
> > > For Field Day we homebrewed a 32 foot vertical out of five swimming pool
> > > poles. Secured to a six foot tripod with spikes in each tripod leg.
> > >
> > > The radiator was a 32 foot length of zip cord.
> > >
> > > Four radials (zip cord) were used at about the 10 foot level drooping
> > down.
> > >
> > > SWR was 1:1.5 to one across the 40 M band
> > >
> > > Used it on 15M as well with SWR less than 2.5 to one.
> > >
> > > Antenna worked well across country on both bands. West coast to east
> > coast.
> > >
> > > Next year I would like to refine it by replacing the swimming pool
poles
> > > with aluminum tubing (6 foot sections) where each section fits into
the
> > > previous one. Figure I will need 6 sections to allow for 4 inches
> inserts.
> > > Then hose clamp them. May have to double up and use double wall
tubing.
> > >
> > > Trying to figure what diameter to start with at the bottom. Greatly
> prefer
> > > NOT to use guy wires.
> > >
> > > Another problem is insulating the 32 foot radiator from the tripod.
> Maybe
> > a
> > > 5 foot section of plastic pipe PVC ???
> > >
> > > Maybe I am better off to use the swimming poles as they didn't fall
down
> > for

> > > 24 hours (;-)
> > >
> > > Ideas appreciated
> > >
> > > --
> > > Lamont Cranston
> > >
> > > The Shadow Knows
> > >
> > >
> >
> >
>
>

279. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 15:18:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40ed66a9$1_8@corp.newsgroups.com>
Source record: 92550

Tainted wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote:
>
>>Tainted wrote:
>>>Anyone know how many ohms I should be measuring at the end of a 25ft
>>>coax cable connected to a 60ft Delta antenna?
>>
>>DC? or RF?
>
> DC

You will be reading the leakage resistance. What kind of coax?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

280. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 16:10:41 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <ufsqe01h4pts5bf15h6sde3krbkjbn76sl@4ax.com>
Source record: 92551

On Wed, 07 Jul 2004 19:16:36 -0400, Albert <pass@pass.com> wrote:

|OK, thanks Richard.
|
|How about this.
|
|30 wavelengths per side, average conducting ground, 12 feet above
|ground.
|
|What angle do I need for best forward gain, what will the takeoff
|angle be at that angle?

Included angle from 12 to 16 degrees will give ~20 dBi at 6 deg
elevation.
|
|If I can get the entire antenna up to 20 feet above ground, how much
|better is the performance?

~ 2 dB more gain at 4 deg el.
|
|Is there any way for me to do modelling myself without burdening you
|or someone with a modeling program? I am not aware of free software
|that will model rhombics or vee's.

4nec2 is free, do a Google search

Multinec is cheap and very flexible.

|
|Thanks,
|
|Art
|
|ky1k at pivot dot net
|
|PS: Some additional info. This is for EME, which does not require much
|movement. Since it is so long, it won't be variable in the elevation
|angle anyway. But, I hope to move one wire a bit so I can steer the
|beam to the left or to the right a little (changing the angle of the
|vee at the same time).

Since I worked VK5MC to complete my 2-meter WAC and he used a slightly
steerable rhombic, I'm not going to say that this won't work, but I
must question why. If you're going to limit yourself to a few minutes
of moon time a month, why not just put up a long fixed Yagi and use it
for both transmit and receive. A forty-foot long Yagi will give the

same gain as the vee, with a *huge* improvement in the pattern and it will have a much more tractable feedpoint impedance.

Wes

281. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 16:20:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pksqe09dr76oi5i95smklic9rv1224s8c1@4ax.com>
Source record: 92552

On Thu, 8 Jul 2004 09:33:45 -0400, "Tam/WB2TT" <t-tammaru@c0mca$t.net>
wrote:

>Hi Richard,
>How about shooting for 112 Ohms, so he can match it with a 1/4 wave section
>of RG11.
>
>Tam/WB2TT

Hi Tam,

That would be an opening between 30ï¿½ and 40ï¿½ (106 to 122 Ohms) with a
gain around 12dBi (11.8 @10ï¿½ to 11.9 @20ï¿½).

Impedance appears to change smoothly through out the full range; gain
and angle less so (but no more than this spread of 10ï¿½).

73's
Richard Clark, KB7QHC

282. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 16:38:33 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <dMeHc.31043$Xq4.505@nwrddc02.gnilink.net>
Source record: 92553

Albert

I'm a little experienced with failure in trying EME on 2 meters. I'm not
a scientist, but have some information that might help you decide which
antenna is best for your situation.
I'm not able to calculate the amount of steering thats available with a
long V antenna. I couldn't even predict the antenna's radiation pattern
shape. If the antenna pattern has about equal beamwidth in both elevation
and azimuth, a 20 DB gain antenna will have about a 20 degree beamwidth (as
I remember).
You probably know all this, but--
The moon rises and sets at a slightly different azimuth each succeeding
day. The azimuth direction to the moon on the horizon might vary by about
50 degrees per year.
I consider the moon to be about 1/2 a degree wide. It will rise at "its
diameter" each 2 minutes.
It looks to me like you'd have a few minutes of 'max gain' each year, and
theres no way for you to predict _*when*_ because the "takeoff angle" at 2
lambda is unpredictable.
If my thinking about *where the moon is* is about right, I predict that
you wont be satisfied with an antenna that isnt more stearable than the V
for moon bounce.

I've read about a guy who made a long yagi antenna by suspending it on
ropes rather than 'booms'. I wonder if you might be more satisfied with a
yagi that you could "roll up" when icy weather approaches.

Jerry

"Albert" <pass@pass.com> wrote in message
news:43kqe0p095isqcfni21vcdmkeke4gd5q32@4ax.com...
>
>
> Hi Ian,
>
> Thanks for your comments.
>
> My hope was to use a v beam instead of a rhombic.
>
> The V is relatively easy to steer, especially if the performance
> doesn't change much if either leg is moved. Note that I hope to leave
> one leg of the beam fixed and steer the az by varying the position
> (and the V angle) of the other leg. Not sure how much changing the
> angle of the V impacts the performance, which is why I asked for
> someone with modeling software.

>
> My hope was to exploit the high gain, simple construction (but poor
> receive) of the V for transmit only and to use the modest sized FO
> yagi for receive only.
>
> If I can get 19 or 20 db from a big V beam, I can probably tollerate
> the limited operating time as well, Q's with big guns should take only
> minutes and medium sized stations should be workable in a 20 minute
> window.
>
> If the computer model predicts a usable gain, I'd like to try putting
> one up.
>
> Regards,
>
> Art
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

283. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 17:12:15 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <40ED806F.DBA66539@uci.edu>
Source record: 92554

```
Cecil Moore wrote:
>
> Tainted wrote:
> > Cecil Moore <w5dxp@hotmail.com> wrote:
> >
> >>Tainted wrote:
> >>>Anyone know how many ohms I should be measuring at the end of a 25ft
> >>>coax cable connected to a 60ft Delta antenna?
> >>
> >>DC? or RF?
> >
> > DC
>
> You will be reading the leakage resistance. What kind of coax?

Isn't he talking about a loop antenna??

jk
```

284. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 17:38:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9f1re093dqlflq57lna1mn66cbtg0ulrk1@4ax.com>
Source record: 92555

On 8 Jul 2004 06:11:09 -0700, k4wge@arrl.net (k4wge) wrote:

>To get back to antennas...
>
>Buoyant Wire Antenna (BWA) System
>Buoyant wires are long, towed antennas that provide a submarine with
>the ability to communicate while remaining deeply submerged.

Hi Bill,

To continue the side-topic, the single link is not enough to complete the picture without a treatment of the sending side of sub communications:
http://www.provcomm.net/pages/joe/monitoring_lf.htm
which contains a discussion of Jim Creek, which is within 30 Miles of me, and once had the reputation of having the world's most powerful transmitter.

73's
Richard Clark, KB7QHC

285. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 18:33:40 UTC
From: dplatt@radagast.org
Message-ID: <10er4s49qsn1k43@corp.supernews.com>
Source record: 92556

>Appreciate the help but it's not a closed loop. At least I don't
>think so. There are two antenna lines - ones 60ft and the other 16ft.
>They are connected to the 529 center post. The ground lead (30ft) is
>connected to the outer part of the 529. I'm pretty sure it's right
>that there is infinite ohms there because they are not physically
>touching in any way. I'm confused because simply adding 25ft of coax
>causes a 2.5meg ohm reading. In essence I'm still across the 529 just
>25ft further away. So nothing should change.

You might (as someone else suggested) be reading some leakage
resistance from your coax. 2.5 megs seems a low reading for coax in
good condition... if it's the coax, you might have gotten some water
or other contamination into the connectors, or into the coax itself.

Depending on how you're holding your meter probes when you do the
measurement, you might be reading your skin resistance by accident.
Make sure your skin isn't touching the metal parts of either probe.

Depending on the meter you are using, you might not be reading just
the resistance. Since you're doing a measurement on a coax and
antenna, the antenna is likely to be picking up some amount of RF from
nearby transmitters. There would probably be some differential-mode
RF within the coax (from in-band reception by the antenna), and likely
some common-mode coming down the outside of the coax. Your meter's
circuitry might be acting as a pathway to complete the RF circuit -
this would allow some amount of RF current to flow through the
metering circuitry (in addition to the DC current which results from
the resistance-measuring voltage the meter is presenting), and the
meter's reading might be the result of this small RF current flow.

As an experiment, try bypassing the bottom end of the coax... create
an RF short circuit across the PL-259 with a .1 uF capacitor. See if
this makes the apparent resistance at this point go up... if so, the
resistance reading was probably due to stray RF getting into the meter.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

286. Re: Delta Sloper Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 18:55:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40ed99ae_7@corp.newsgroups.com>
Source record: 92557

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>You will be reading the leakage resistance. What kind of coax?
>
> Isn't he talking about a loop antenna??

Here's a quote by the author from a few postings ago.

>>> Appreciate the help but it's not a closed loop.

So it must be an open loop.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

287. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 20:19:41 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <ccka8s$1kq4$1@f04n12.cac.psu.edu>
Source record: 92558

Hi:
Do you have the loop horizontal or vertical? Horizontal mounting requires it to be 20 feet (sorry can't do meter in my head) above ground. Your balcony most likely has steel structure holding it up and that is always ground. Try mounting it vertical if you have not already done so.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"vandmand" <vandmand@loveletters.dk> wrote in message
news:40ed387e$0$176$edfadb0f@dread11.news.tele.dk...
> I have just started to use my new MFJ 1876 located om my balcony.
> Before the antenna went into operartion the motor unit has to be replaced.
> :-(
> However, my problem is that the antenna will not tune in the frequency
area
> 10.1 - 18 MHz.
> On higher band there is no problem.
> I known that the loaction on my balcony is not ideal but i don't think
thats
> the problem or?
> Any ideas??
> Best regards
> OZ1JZV - John
>
>

288. phased vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 20:56:13 UTC
From: mike beauchamp <mbeauchamp@cogeco.ca>
Message-ID: <NxiHc.37850$XY6.2799392@read2.cgocable.net>
Source record: 92559

Hello i was wondering,
If i built a 4 element vhf lowband phased array antenna
With a gamma match.
and a phasing harness.

I was wondering , what would be the spacing from the mast to the element?
would it be? 1/4 1/2 or 1/8 wavelenth?
and what would be the formula for finding this distance?
this antenna wont be the folded dipole type.
it will have elements made from 3/8 aluminum tubing.
my second question is,
what would be the length of my gamma match be for a half wave element say,
on 50.000 mhz
and what would the formula be for finding this out.
i know the spacing between elements would be 1/4 wavelength. And the
elements would be a 1/2 wavelength. and the phasing harness is made out of
odd 1/4 wavelengths . but was never told the spacing for the element from
the mast or the length of the gamma match.
can anyone help/provide a website for this info thanks ..
ve3 tya
pte mike beauchamp

289. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 20:58:39 UTC
From: Brian Running <brunning@XXameritechXX.net>
Message-ID: <3AiHc.34246$eH1.16329318@newssvr28.news.prodigy.com>
Source record: 92560
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

> >Instead of playing the 'game' of posting a reply to anything I post.
>
> Your ego is showing.

Uh oh -- worlds are colliding. Remember, rec.radio.shortwave is not a radio newsgroup, the people there are not knowledgeable about, or interested in, the technical aspects of radio. If it doesn't involve nasty name-calling or wild-eyed, mouth-foaming political looniness, then it doesn't belong in rec.radio.shortwave.

290. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 21:46:26 UTC
From: Albert <pass@pass.com>
Message-ID: <50fre0lbo5caeu079urcjs7622a3aghv32@4ax.com>
Source record: 92561

On Thu, 08 Jul 2004 09:10:41 -0700, Wes <n7ws@_yahoo.com> wrote:

>On Wed, 07 Jul 2004 19:16:36 -0400, Albert <pass@pass.com> wrote:
>
>|OK, thanks Richard.
>|
>|How about this.
>|
>|30 wavelengths per side, average conducting ground, 12 feet above
>|ground.
>|
>|What angle do I need for best forward gain, what will the takeoff
>|angle be at that angle?
>
>Included angle from 12 to 16 degrees will give ~20 dBi at 6 deg
>elevation.
>|
>|If I can get the entire antenna up to 20 feet above ground, how much
>|better is the performance?
>
>~ 2 dB more gain at 4 deg el.
>|
>|Is there any way for me to do modelling myself without burdening you
>|or someone with a modeling program? I am not aware of free software
>|that will model rhombics or vee's.
>
>4nec2 is free, do a Google search
>
>Multinec is cheap and very flexible.
>
>|
>|Thanks,
>|
>|Art
>|
>|ky1k at pivot dot net
>|
>|PS: Some additional info. This is for EME, which does not require much
>|movement. Since it is so long, it won't be variable in the elevation
>|angle anyway. But, I hope to move one wire a bit so I can steer the
>|beam to the left or to the right a little (changing the angle of the
>|vee at the same time).
>
>Since I worked VK5MC to complete my 2-meter WAC and he used a slightly

>steerable rhombic, I'm not going to say that this won't work, but I
>must question why. If you're going to limit yourself to a few minutes
>of moon time a month, why not just put up a long fixed Yagi and use it
>for both transmit and receive. A forty-foot long Yagi will give the
>same gain as the vee, with a *huge* improvement in the pattern and it
>will have a much more tractable feedpoint impedance.
>
>Wes

Hi Wes,

Thanks for the information, it's just what I needed.

I am not sure how dbd converts to dbi, but a 100 foot 43 element rope yagi gives 19 dbd.

My motivation for starting this was that I had the room for a large V beam and that it might be practical if I could get the same gain as the big rope yagi.

The V beam is way easier to put up and much cheaper and simpler to construct.

From looking at data from smaller rhombics, it appears they are poor for receiving as they have some major lobes that point towards the high noise temperature Earth, which is why I wanted the V for transmit only. I don't think the radiation off the back of the antenna will do any harm in transmit only, so my hope was that it does not need to be terminated.

Your gain figures indicate this bears further investigation, even though I would be dependent on moon set or moon rise to make my Q's. But, people with yagis have had that limitation and live with it just fine.

I'll look up 4nec2 and try to play with it myself. Hopefully, it will handle large V's.

Regards,

A

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

291. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 22:19:18 UTC
From: Frank Dresser <analogdial@worldnet.att.net>
Message-ID: <GLjHc.217303$Gx4.129737@bgtnsc04-news.ops.worldnet.att.net>
Source record: 92562
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

"Brian Running" <brunning@XXameritechXX.net> wrote in message
news:3AiHc.34246$eH1.16329318@newssvr28.news.prodigy.com...
> > >Instead of playing the 'game' of posting a reply to anything I post.
> >
> > Your ego is showing.
>
> Uh oh -- worlds are colliding. Remember, rec.radio.shortwave is not a
radio
> newsgroup, the people there are not knowledgeable about, or interested in,
> the technical aspects of radio.

Hey! Speak for yourself!

> If it doesn't involve nasty name-calling or
> wild-eyed, mouth-foaming political looniness, then it doesn't belong in
> rec.radio.shortwave.
>
>

If it weren't for wild-eyed, mouth-foaming political looniness, I wouldn't
even bother turning my shortwave radio on.

Frank Dresser

292. antenne eh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 23:35:23 UTC
From: alex.balcou@numericable.fr
Message-ID: <40edd822$0$654$a3f2974a@nnrp1.numericable.fr>
Source record: 92563

has someone used eh antennas made in italy and with what kind of results..tks...f6hfe..

293. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 23:37:58 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40eddad7$0$15838$39cecf19@news.twtelecom.net>
Source record: 92564

Albert

I can't help on the V any more than others, such as Richard, are, but I can give you another cheap alternative that is as easy to repoint as your V, maybe easier. VE7BQH published a rope beam for EME a while ago. It is as cheap as rope and the elements plus TyWraps cost. The only downside I can see is making the match, but that's not really too tough, and you have to match to the V anyway. It will also have more gain than the V would for the same real estate.

http://www.bigskyspaces.com/w7gj/longyagi.htm

tom
K0TAR

Albert wrote:

> On Wed, 07 Jul 2004 19:14:03 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
>
>>Art
>>
>>Which brand of EME is this for? If for one of the new digital modes,
>>you don't need that much gain, as you may already know. If it's for CW,
>>having a ton of gain in one direction only gives you a very seldom
>>available and very short window.
>>
>
>
> Thanks for the eme advice.
>
> But, I was asking about the gain of a vee beam because they are cheap
> to build and easy to put back up when the weather takes them out. We
> have major ice storms often here.
>
> Which "Brand of eme' is irreleveant, gain is gain regardless of which
> mode is used. Excess gain is never wasted, it either makes the QSO
> faster or allows one to work smaller stations or allows SSB instead of
> CW/digital modes.
>
> If the angle of the V makes little difference to the actaul gain, it
> can be steered by moving either leg, which is also easy to do.
>
> Although I can only work on my moon rise or moon set, more gain is
> always better. Since I can't elevate my yagi, a non elevatable vee

> beam for transmit only might give higher gain. The yagi would be for
> receive only.
>
> Having different receive and transmit antennas has benefits as well,
> such as no switching loss and no need to protect my gaasfet during
> transmit.
>
> Can you offer any suggestions regarding the original question?
>
> Thanks
>
> A
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

294. Re: Yaesu Rotor Repair

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-08 23:54:01 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0407081554.1cff6c5d@posting.google.com>
Source record: 92565

"Topaz305RK" <2smoore@nemontel.net> wrote in message
news:<96udnZaJgJoPWHHdRVn-uw@vnet-inc.com>...
> Anyone know of a rotor repair service, other than Yaesu, for the G-800SDX
> rotor. Have a unit in need of repair and after much searching have come up
> with nothing. Checked all the old favorites, Norms, Rotor Doctor (CATS),
> etc., none mention the Yaesu line of rotors.
>
> Any help would be greatly appreciated.

Try Tim Davidson W3PLC:

http://www.tdcommunications.net/services1.htm

He did a nice repair job on my seriously scrambled FT-847 very
inexpensively while I sat there and watched. Nice shop, outstanding
individual. He doesn't specifically state in his list of services that
he fixes rotators but he mentioned that he does. You can't lose much
by asking him the question.

Brian w3rv

295. dallas amateur radio club 2m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 03:06:09 UTC
From: alex.balcou@numericable.fr
Message-ID: <40ee0990$0$654$a3f2974a@nnrp1.numericable.fr>
Source record: 92566

back in the 1978 1979 a peculiar 2m ant was designed and made by hams at the dallas amateur radio club.anyone remembers ? looked like 2 squares ...one vertical and the other horizontal.....tks for ur help....f6hfe ex wb5oxz....yann.

296. Re: 2 meter & GPS antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 03:55:12 UTC
From: Edward Lawrence <wa5swd@worldnet.att.net>
Message-ID: <AGoHc.74901$OB3.14129@bgtnsc05-news.ops.worldnet.att.net>
Source record: 92567

Hi Fellows.

I tried hooking a 2 mtr/440 MHz antenna to my Garmin GPS 90. Zip, nada!
I did this while doing a bunch of work on a passive filter to separate the
energy to direct it to the right place. With this result I discontinued the
project as futile.

I wish to dispel the myth that an antenna with a null overhead can not be
used as a GPS antenna. The satellite overhead does not stay in the very
narrow null long enough to be a operational problem. I used with good
effect a simple quarter wave vertical over a ground plane and my Garmin
locked up nicely. Translation: Stick a bent up paper clip into the BNC
jack as a vertical and the thing still works! Not as strong but no reason
to give up if your 'real' antenna gets busted.

For the ease of you folks who want to duplicate my experiment, my
math shows that the proper length should be 1 7/8 inches, or 47.6 mm
for the metric minded.

Ed WA5SWD

"G.Beat" <now9spamgb@no.comcast.spam.net> wrote in message
news:etYFc.7440$JR4.7037@attbi_s54...
>
> "Gary S." <Idontwantspam@net> wrote in message
> news:rvfee0h99od1njg510kh5v8utp3f01m1f8@4ax.com...
> > On Sat, 03 Jul 2004 20:53:32 GMT, "G.Beat"
> > <now9spamgb@no.comcast.spam.net> wrote:
> >
> >>You should investigate the usage of a mobile antenna, such as the GPSx
> >>Survivor by Antenex, 2000-205 Bloomingdale Road Glendale Heights,
> >>Illinois
> >>60139
> >>http://www.antenex.com/
> >>
> >>GPSx Survivor - Model GPSDVHF
> >>It comes complete with 14 feet of RG174 terminated with an SMB connector
> >>for
> >>GPS and 14 feet RG58A/U terminated with N connector. It is mounted
through
> >>a
> >>5/8" diameter mounting hole and secured with an included heavy stainless
> >>steel jam nut.
> >>
> > Sounds like a good solution.
> >

> > However, I would not call that a dual band antenna, but two different
> > antennas mounted in the same package.
> >
> > How is the active GPS antenna powered?
>
> Gary -
>
> Correct, this is 2 antenna is one mounting - which is important for some
> mobile installations (e.g. public safety and utility vehicles) AND since
the
> desired characteristics of each antenna are entirely different.
>
> For GPS at 1.5 GHz -- the antenna pattern needs to see the entire sky.
Why?
> GPS receivers require a minimum of 4 satellites in view to perform a
> position lock - and the constellation of GPS satellites are always moving
> (orbit) in you visible sky. Look at any new car (e.g. 2004 Honda Accord
> with Navigation option) - you will see the GPS antenna housing at the
center
> of the hood back - for maximum sky visibility.
>
> For 2 meter mobile - the desired antenna pattern is toward the horizon.
> This is why 5/8 wave antennas are popular - since their pattern at the
> horizon is superior to almost all other antenna types (e.g. 19" 1/4 wave
or
> 38" 1/2 wave antennas).
>
> Power to the antenna is an excellent question. There are 2 types of GPS
> antennas - passive and active.
>
> "Passive" GPS antennas (also called substrates) do not include a Low Noise
> Amplifier (LNA) and are best suited to GPS applications requiring a short
> distance, 1 inch to 3 feet, between the GPS receiver and antenna. Passive
> antennas require an LNA on the GPS receiver (such as the GT+ "R4" part
> number series) or mounting a separate LNA close to the RF input connector
of
> a receiver that does not include an on-board LNA (such as the GT+ "R3"
> series and the M12).
>
> "Active" GPS antennas include a built-in Low Noise Amplifier (LNA) which
> provides sufficient gain to overcome coax cable losses while providing the
> proper signal level to the GPS receiver. This LNA requires power from the
> GPS receiver to operate -- the GPS receiver antenna connector (just like
the
> older style UHF TV pre-amps from the 1970s).
> The GPS voltage standard use to be 5 volts -- BUT this was recently been
> changed to 3.3. volt by most manufacturers.
>
> In order to prevent damage to the GPS receiver or antenna -- YOU MUST
MATCH

> the GPS receiver and antenna.
> Some antenna manufacturers can handle both voltages - BUT NOT ALL.
>
> The company that I obtain my GPS supplies form is Synergy Systems, LLC in
> San Diego. They are the largest distributor of Motorola GPS receivers -
and
> have been a supported of TAPR, Amateur Radio APRS usage as well as
> educational experimenters (GPS for Scholars program).
> http://www.synergy-gps.com/
>
> I always check their excess inventory sale for inexpensive GPS items
> (Acrobat PDF)
> The Oncore units are OEM boards and require a TAC-2 or equivalent
interface
> board for operation
> http://www.synergy-gps.com/Excess_Inventory.pdf
>
> Greg, w9gb
>
>

297. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 06:24:26 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-9467C4.23251408072004@news.sf.sbcglobal.net>
Source record: 92568
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

In article <3AiHc.34246$eH1.16329318@newssvr28.news.prodigy.com>,
"Brian Running" <brunning@XXameritechXX.net> wrote:

> > >Instead of playing the 'game' of posting a reply to anything I post.
> > >
> > Your ego is showing.
>
> Uh oh -- worlds are colliding. Remember, rec.radio.shortwave is not a radio
> newsgroup, the people there are not knowledgeable about, or interested in,
> the technical aspects of radio. If it doesn't involve nasty name-calling or
> wild-eyed, mouth-foaming political looniness, then it doesn't belong in
> rec.radio.shortwave.

This is why you should only cross post for a really good reason.

The amateur newsgroups seem to have a plentiful supply of people that
are not knowledgeable about the radio hobby.

The example above is just the end of a thread of the BS that poses as
"knowledge" on the amateur news groups most days.

--
Telamon
Ventura, California

298. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 11:47:53 UTC
From: vandmand <vandmand@loveletters.dk>
Message-ID: <40ee7843$0$163$edfadb0f@dread11.news.tele.dk>
Source record: 92569

"John Passaneau" <jxp16@psu.edu> skrev i en meddelelse
news:ccka8s$1kq4$1@f04n12.cac.psu.edu...
> Hi:
> Do you have the loop horizontal or vertical? Horizontal mounting requires
it
> to be 20 feet (sorry can't do meter in my head) above ground. Your balcony
> most likely has steel structure holding it up and that is always ground.
Try
> mounting it vertical if you have not already done so.
>
>
> --
>

Hi

Thanks for you mail.

The loop is mounted vertically.

Yes, your are right. There is a lot of steel and aluminium in the structure
of my balcony.

I have tried to replace the loop but it still "refuse" to tune below 21 MHz.

I can se a small dip on the meter but are not able tuned it manually.

From 21 MHz and above I get a very low SWR.

In the instruction manual it is mentioned if there is a high SWR due to
placement of the loop, the feed loop in the antenna can be tuned to get a
lower SWR.

I have not tried this solution yet due to the good SWR on higher band, but
perhaps I should.

Regards
OZ1JZV - John

299. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 16:22:01 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <JCzHc.49499$%_6.20861@attbi_s01>
Source record: 92570

I think I would try adding a capacitor first
Art

"vandmand" <vandmand@loveletters.dk> wrote in message
news:40ee7843$0$163$edfadb0f@dread11.news.tele.dk...
>
> "John Passaneau" <jxp16@psu.edu> skrev i en meddelelse
> news:ccka8s$1kq4$1@f04n12.cac.psu.edu...
> > Hi:
> > Do you have the loop horizontal or vertical? Horizontal mounting
requires
> it
> > to be 20 feet (sorry can't do meter in my head) above ground. Your
balcony
> > most likely has steel structure holding it up and that is always ground.
> Try
> > mounting it vertical if you have not already done so.
> >
> >
> > --
> >
>
> Hi
>
> Thanks for you mail.
>
> The loop is mounted vertically.
>
> Yes, your are right. There is a lot of steel and aluminium in the
structure
> of my balcony.
>
> I have tried to replace the loop but it still "refuse" to tune below 21
MHz.
>
> I can se a small dip on the meter but are not able tuned it manually.
>
> From 21 MHz and above I get a very low SWR.
>
> In the instruction manual it is mentioned if there is a high SWR due to
> placement of the loop, the feed loop in the antenna can be tuned to get a
> lower SWR.
>
> I have not tried this solution yet due to the good SWR on higher band, but

> perhaps I should.
>
>
>
> Regards
> OZ1JZV - John
>
>

300. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 16:37:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0cite0lqso1ma1jnth52ds3tl4suk484gq@4ax.com>
Source record: 92421

On Fri, 09 Jul 2004 16:22:01 GMT, "aunwin" <aunwin@insightbb.com>
wrote:
>I think I would try adding a capacitor first
It has a capacitor.

301. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 16:50:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k0jte097a32hph44mp1q7e7r5fqo922h3q@4ax.com>
Source record: 92422

On Fri, 9 Jul 2004 12:47:53 +0100, "vandmand"
<vandmand@loveletters.dk> wrote:
>In the instruction manual it is mentioned if there is a high SWR due to
>placement of the loop, the feed loop in the antenna can be tuned to get a
>lower SWR.
>
>I have not tried this solution yet due to the good SWR on higher band, but
>perhaps I should.

Hi John,

Yes, the manual suggests this, but it seems strange advice. Move your
antenna inside to a room that has less metal nearby (away from railing
and major building components) and confirm you "can" adjust for low
SWR at your problem frequencies.

73's
Richard Clark, KB7QHC

302. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 16:59:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ccmitl$bd7$1@sparta.btinternet.com>
Source record: 92423

> >I think I would try adding a capacitor first.

> It has a capacitor.

What is to prevent him adding another. The more pF the merrier.

303. vertical design

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 17:11:47 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-F827F0.10114709072004@comcast.dca.giganews.com>
Source record: 92424

I am planning a 20m vertical dipole array here (no room for a tower - yet) and am seeking some advice on the sizes of nesting aluminum tubing to ensure adequate strength. I've looked about in what I think are the usual web and non-web places and can't find any formal discussion. Anyone know of such a discussion or can perhaps lend some anecdotal info. Thanks very much in advance.

Gary
KA9RAO

304. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 17:39:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9tlte0tcr7uu2hb6a46nao9buv75uu1lel@4ax.com>
Source record: 92425

On Fri, 9 Jul 2004 16:59:33 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:
>> >I think I would try adding a capacitor first.
>> It has a capacitor.
>What is to prevent him adding another. The more pF the merrier.
>
This is like charging the battery to fix a flat tire.

305. Re: vertical design

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 18:52:06 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <rPBHc.794$TT2.678@fed1read01>
Source record: 92426
Body handling: Inline uuencoded payload not displayed: at_medium.gif

Check with Texas Towers
URL:
http://www.texastowers.com/aluminum.htm

Saw a calculator there some where but can't find it now -- maybe send em an
E-Mail
sales@texastowers.com salestexastowers.com

--
Lamont Cranston

The Shadow Knows
"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-F827F0.10114709072004@comcast.dca.giganews.com...
> I am planning a 20m vertical dipole array here (no room for a tower -
> yet) and am seeking some advice on the sizes of nesting aluminum tubing
> to ensure adequate strength. I've looked about in what I think are the
> usual web and non-web places and can't find any formal discussion.
> Anyone know of such a discussion or can perhaps lend some anecdotal
> info. Thanks very much in advance.
>
> Gary
> KA9RAO

[Inline uuencoded payload not displayed: at_medium.gif]

306. Re: What are the ODDS?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 20:50:10 UTC
From: Ed Cregger <ecregger@homtail.com>
Message-ID: <ccn0e20169h@enews3.newsguy.com>
Source record: 92427

"Gary V. Deutschmann, Sr." <raiar@bbs.galilei.com.nospam> wrote in message
news:40e9787a.172663609@news.galilei.com...
> Hi Gang
>
> Last night was the 4th (doh, we all knew that!)
>
> But how many of you woke up this morning with a rocket perched upside
> down on top of your tallest antenna?
>
> I have a Diamond triband 2/220/440 antenna up some 60+ feet.
> The remains of a finned rocket about 10 to 12 inches tall has managed
> to land on top of this antenna, nose down fins up. Right now it's at
> the very top, but I'm sure in a few days will probably slide down the
> antenna shaft coming into contact with the radials.
>
> Should I worry about this (chemical reactions) or just forget it and
> let time and weather take it's toll on the remains?
>
> TTUL - 73+ de Gary - KGZP
>
>

Quick! Call Homeland Security! <G>

Ed Cregger, NM2K

307. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-09 21:50:09 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <lqEHc.58904$Oq2.11406@attbi_s52>
Source record: 92428

Since it normally requires more capacitance at that end of the band it was
my intent to make the capacitance larger. But it would appear that I am in
error and should be scolded , tho I hardly believe that it is inductance
should be added for it to present a purely resistive load, It will be
interesting to find out why.
Apologies for the incorrect suggestion
Art

"aunwin" <aunwin@insightbb.com> wrote in message
news:JCzHc.49499$%_6.20861@attbi_s01...
> I think I would try adding a capacitor first
> Art
>
> "vandmand" <vandmand@loveletters.dk> wrote in message
> news:40ee7843$0$163$edfadb0f@dread11.news.tele.dk...
> >
> > "John Passaneau" <jxp16@psu.edu> skrev i en meddelelse
> > news:ccka8s$1kq4$1@f04n12.cac.psu.edu...
> > > Hi:
> > > Do you have the loop horizontal or vertical? Horizontal mounting
> requires
> > > it
> > > > to be 20 feet (sorry can't do meter in my head) above ground. Your
> balcony
> > > > most likely has steel structure holding it up and that is always
ground.
> > Try
> > > > mounting it vertical if you have not already done so.
> > > >
> > > >
> > > > --
> > > >
> > >
> > > Hi
> > >
> > > Thanks for you mail.
> > >
> > > The loop is mounted vertically.
> > >
> > > Yes, your are right. There is a lot of steel and aluminium in the
> structure
> > > of my balcony.
> > >
> > > I have tried to replace the loop but it still "refuse" to tune below 21

> MHz.
> >
> > I can se a small dip on the meter but are not able tuned it manually.
> >
> > From 21 MHz and above I get a very low SWR.
> >
> > In the instruction manual it is mentioned if there is a high SWR due to
> > placement of the loop, the feed loop in the antenna can be tuned to get
a
> > lower SWR.
> >
> > I have not tried this solution yet due to the good SWR on higher band,
but
> > perhaps I should.
> >
> >
> >
> > Regards
> > OZ1JZV - John
> >
> >
>
>

308. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 02:00:25 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40ef4dba$0$82993$39cecf19@news.twtelecom.net>
Source record: 92429

Unless what he wants to do is lower the frequency. It is, after all,
just a very leaky tank circuit with "no load". (That was "tongue in
cheek" for those of you that normally fail to recognize it)

tom
K0TAR

Richard Clark wrote:

> On Fri, 9 Jul 2004 16:59:33 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>>>>I think I would try adding a capacitor first.
>>>
>>>It has a capacitor.
>>
>>What is to prevent him adding another. The more pF the merrier.
>>
>
> This is like charging the battery to fix a flat tire.

309. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 04:54:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bvsue0ta5uovf2qdfnbm8jllhnkvenrg6u@4ax.com>
Source record: 92430

On Fri, 09 Jul 2004 21:00:25 -0500, Tom Ring <news0000@taring.org>
wrote:
>Unless what he wants to do is lower the frequency.

Hi Tom,

But that is NOT what he is trying to do. He simply wants it to work
"as advertised." Everyone is re-inventing it to do what it was
already designed to do. It already resonates at these frequencies, to
add capacitance is very poor advice for any of several reasons.

What John needs is to determine if it is broke, or if it is
environment that is getting in the way. He is not asking for the
antenna to tune outside of its characteristic range.

The advice in the handbook suggests he open up the case and squash the
feed loop to compensate for nearby interfering, metallic structures.
This may solve the problem, but it is a piss-poor solution. If it
were a general, preferrable condition, they would sell them all this
way.

73's
Richard Clark, KB7QHC

310. Computeradio DR1 in a carry-on luggage.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 05:20:01 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040710012001.11616.00001165@mb-m11.aol.com>
Source record: 92431

Info and pictures of DR1 packed to go on expedition is at

http://www.computeradio.us/expedition_pack.htm

for that vertical antenna on the beach there is 10m telescoping fiberglass mast
that collapses down to less than 4 feet.

73 Yuri, K3BU.us

311. Re: Computeradio DR1 in a carry-on luggage.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 12:39:38 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <esRHc.44449$qw1.37032@nwrddc01.gnilink.net>
Source record: 92432

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040710012001.11616.00001165@mb-m11.aol.com...
> Info and pictures of DR1 packed to go on expedition is at
>
> http://www.computeradio.us/expedition_pack.htm
>
> for that vertical antenna on the beach there is 10m telescoping fiberglass
mast
> that collapses down to less than 4 feet.
>
> 73 Yuri, K3BU.us

I would be amenable to seeing some specs rather than boxes.
Especially vs the Flex Radio- their specs and software are quite impressive.
Dale W4OP

312. Re: Computeradio DR1 in a carry-on luggage.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 13:23:33 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040710092333.13519.00001167@mb-m12.aol.com>
Source record: 92433

>
>I would be amenable to seeing some specs rather than boxes.
>Especially vs the Flex Radio- their specs and software are quite impressive.
>Dale W4OP

Patience my dear Watson :-)
They are coming as we progress, we are aiming at beating what is out there and packing more stuff into a box. We are releasing info on stuff that we have, no vaporware or phoney specs and claims. Just want to alert to what is coming so you don't spend $10k on something that will not measure up.
Stay tuned!

Yuri, www.K3BU.us
www.computeradio.us - home of Dream Radio One

313. Finally!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 13:44:23 UTC
From: Ed Cregger <ecregger@homtail.com>
Message-ID: <ccorrm0222h@enews3.newsguy.com>
Source record: 92434

I was finally able to record MIDI drums, analog audio guitar and analog audio bass with Sonar 3 yesterday. You have no idea how happy I am at the moment.

It still needs a lot of work, but at least I'm on my way. Thanks to all of those that helped or offered to help. Much appreciated.

Ed Cregger

314. Re: Finally!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 18:22:30 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrncf0d1e.2vuj.bit-bucket@walnut.config.com>
Source record: 92435

On Sat, 10 Jul 2004 09:44:23 -0400, Ed Cregger hath writ:
> I was finally able to record MIDI drums, analog audio guitar and analog
> audio bass with Sonar 3 yesterday. You have no idea how happy I am at the
> moment.
>
> It still needs a lot of work, but at least I'm on my way. Thanks to all of
> those that helped or offered to help. Much appreciated.
>
> Ed Cregger

Gee, I wonder if I could get one or more of _my_ antennas to perform thus?

315. Re: dallas amateur radio club 2m antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 22:37:20 UTC
From: rmonagha@engr.smu.edu
Message-ID: <ccpr30erh1@blaze.seas.smu.edu>
Source record: 92436

why not email them directly? see http://www.w5fc.org/ hth bobm
--
****
* Robert Monaghan POB 752182 Southern Methodist Univ. Dallas Tx 75275 *
**********Standard Disclaimers Apply**********

316. ICOM IC2100H .. Any Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 22:53:13 UTC
From: Don <nospam@nospamyahoo.com>
Message-ID: <tr_Hc.38408$6e7.20196@nwrddc03.gnilink.net>
Source record: 92437

Hi everyone... I know this may be the wrong group but I was hoping someone could help.
I have a question please. I just purchased a IC2100H 2 meter.
Does any one have any Info(Good/Bad/Indeferent)about this radio.
Are there any mods that can be done to this radio?
Or do you know where Info may be obtained?

Thanks In Advance
Don

317. Re: ICOM IC2100H .. Any Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 22:59:37 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <tx_Hc.51$3u2.45@fed1read01>
Source record: 92438

155 opinions (stress the word opinions) at eHam reviews URL:
http://www.eham.net/reviews/detail/222

Mods at mods.dk URL:
http://www.mods.dk/view.php?ModelId=311

Maybe More mods at URL:
http://ac6v.com/techref.htm#MODS

--
Lamont Cranston

The Shadow Knows
"Don" <nospam@nospamyahoo.com> wrote in message
news:tr_Hc.38408$6e7.20196@nwrddc03.gnilink.net...
> Hi everyone... I know this may be the wrong group but I was hoping someone
> could help.
> I have a question please. I just purchased a IC2100H 2 meter.
> Does any one have any Info(Good/Bad/Indeferent)about this radio.
> Are there any mods that can be done to this radio?
> Or do you know where Info may be obtained?
>
> Thanks In Advance
> Don
>
>

318. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-10 23:30:40 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40f07c21$0$4719$39cecf19@news.twtelecom.net>
Source record: 92439

Well, how would you suggest he troubleshoot it?

I would drop some extra C in to determine if that's what's needed. What is it going to hurt? Otherwise all he has left, from what you have suggested, is to complain to the manufacturer.

At the least, he should determine what, if anything, makes a difference before complaining.

tom
K0TAR

Richard Clark wrote:

> On Fri, 09 Jul 2004 21:00:25 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
>>Unless what he wants to do is lower the frequency.
>
>
> Hi Tom,
>
> But that is NOT what he is trying to do. He simply wants it to work
> "as advertised." Everyone is re-inventing it to do what it was
> already designed to do. It already resonates at these frequencies, to
> add capacitance is very poor advice for any of several reasons.
>
> What John needs is to determine if it is broke, or if it is
> environment that is getting in the way. He is not asking for the
> antenna to tune outside of its characteristic range.
>
> The advice in the handbook suggests he open up the case and squash the
> feed loop to compensate for nearby interfering, metallic structures.
> This may solve the problem, but it is a piss-poor solution. If it
> were a general, preferrable condition, they would sell them all this
> way.
>
> 73's
> Richard Clark, KB7QHC

319. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 00:04:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tov0f0tj53d6n75j31qof7vkcakj2fhu8e@4ax.com>
Source record: 92440

On Sat, 10 Jul 2004 18:30:40 -0500, Tom Ring <news0000@taring.org>
wrote:

>Well, how would you suggest he troubleshoot it?

Hi Tom,

I've already addressed that, as has the manufacturer.

>I would drop some extra C in to determine if that's what's needed. What
>is it going to hurt? Otherwise all he has left, from what you have
>suggested, is to complain to the manufacturer.

Just "add some extra C?" Think he could find a 20KV rated cap with
100A leads at Radio Shack? Do you and Reg seriously think that a one
loop inductor and simple cap have been so confusing to manufacture
that gum and bailing wire will fix it?

We may as well offer him to file down the inductor to raise the R to
accomplish the same thing. It doesn't take much, a very thin saw
cutting a notch could do it pretty quickly. With luck, it may even
self-heal welding the slot shut.

The manual's suggestion to squeeze the feed loop is beginning to look
better already.

If it needs more C to tune, it isn't for lack of plates or their mesh.
More likely it is the capacitor drive system.
>
>At the least, he should determine what, if anything, makes a difference
>before complaining.

That has already been offered. If anything, John should determine
that it isn't a razor thin null that is escaping his attempts to lower
SWR.

73's
Richard Clark, KB7QHC

320. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 00:19:56 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40f087ad$0$75445$39cecf19@news.twtelecom.net>
Source record: 92441

Sorry, but you didn't address anything. All your previous responses follow.

Richard Clark wrote:

#1 -

It has a capacitor.

#2 -

Yes, the manual suggests this, but it seems strange advice. Move your antenna inside to a room that has less metal nearby (away from railing and major building components) and confirm you "can" adjust for low SWR at your problem frequencies.

#3 -

This is like charging the battery to fix a flat tire.

#4 -

ut that is NOT what he is trying to do. He simply wants it to work "as advertised." Everyone is re-inventing it to do what it was already designed to do. It already resonates at these frequencies, to add capacitance is very poor advice for any of several reasons.

What John needs is to determine if it is broke, or if it is environment that is getting in the way. He is not asking for the antenna to tune outside of its characteristic range.

The advice in the handbook suggests he open up the case and squash the feed loop to compensate for nearby interfering, metallic structures. This may solve the problem, but it is a piss-poor solution. If it were a general, preferrable condition, they would sell them all this way.

Sorry but none of this seems to be advice that would help him. You didn't address anything. All you seem to be able to do is criticize other's suggestions and offer nothing yourself.

I hope to actually see you try to help someone sometime.

At least I am trying.

73
tom
K0TAR

Richard Clark wrote:

> On Sat, 10 Jul 2004 18:30:40 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
>
>>Well, how would you suggest he troubleshoot it?
>
>
> Hi Tom,
>
> I've already addressed that, as has the manufacturer.
>
>

321. Re: ICOM IC2100H .. Any Info?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 01:08:11 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrncf14q2.iaa.bit-bucket@walnut.config.com>
Source record: 92442

```
On Sat, 10 Jul 2004 15:59:37 -0700, Da Shadow hath writ:
> 155 opinions (stress the word opinions) at eHam reviews URL:
> http://www.eham.net/reviews/detail/222
>
> Mods at mods.dk URL:
> http://www.mods.dk/view.php?ModelId=311
>
> Maybe More mods at URL:
> http://ac6v.com/techref.htm#MODS
>
> --
> Lamont Cranston
>
> The Shadow Knows
> "Don" <nospam@nospamyahoo.com> wrote in message
> news:tr_Hc.38408$6e7.20196@nwrddc03.gnilink.net...
>> Hi everyone... I know this may be the wrong group but I was hoping someone
>> could help.
>> I have a question please. I just purchased a IC2100H 2 meter.
>> Does any one have any Info(Good/Bad/Indeferent)about this radio.
>> Are there any mods that can be done to this radio?
>> Or do you know where Info may be obtained?
>>
>> Thanks In Advance
>> Don

And 442 hits on groups.google.com - "ic-2100h group:rec.radio.*"

...most of which, unlike yours, posted in an appropriate ng.
```

322. Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 01:25:32 UTC
From: j999w@aol.com
Message-ID: <20040710212532.23777.00001462@mb-m28.aol.com>
Source record: 92443

I already have a 5 element, 6m beam installed on a telescoping pushup pole guyed with metalic guys. I'm thinking of putting a matching beam below the present one and phasing them (with top/bottom/both switching).

Will the metalic guys have much effect on the bottom antenna? There will be about 3 ft of clearance at minimum when turning.

73,

jw
K9RZZ

323. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 02:02:25 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <5s61f0l3m9i5kgdliel2278j3n1feo7h0k@4ax.com>
Source record: 92444

On 11 Jul 2004 01:25:32 GMT, j999w@aol.com (J999w) wrote:

>I already have a 5 element, 6m beam installed on a telescoping pushup pole
>guyed with metalic guys. I'm thinking of putting a matching beam below the
>present one and phasing them (with top/bottom/both switching).
>
>Will the metalic guys have much effect on the bottom antenna? There will be
>about 3 ft of clearance at minimum when turning.
>
>73,
>
>jw
>K9RZZ
I've got my 6 meter beam about the same distance from my guy wires and
haven't found any problems. Of course the guys were always there so I
don't have the benefit of a before and after comparison. I've checked
the VSWR with the antenna pointing different directions to see if it
changes as the position of the elements in relation to the guys had
any effect and there were no change. Once you've finsished installing
the second beam and the switching don't forget to point it toward
Southern California during band openings - I've got Illinois, Iowa and
Michigan but no Wisconsin .... yet, hopefully your new setup
will change that 8-}

73 & best of luck,
Howard

324. Re: MFJ 1786 magnetic loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 02:12:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fd81f0ptc8sc64bkq95d8uinn30vs3se88@4ax.com>
Source record: 92445

On Sat, 10 Jul 2004 19:19:56 -0500, Tom Ring <news0000@taring.org>
wrote:

>At least I am trying.

Hi Tom,

Must've missed it, unless it was the pale joke.

73's
Richard Clark, KB7QHC

325. Something to break the monotony!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 03:08:32 UTC
From: NN7K - Jim <nn7kexk7zfgnospam@sbcglobal.net>
Message-ID: <Qa2Ic.8879$ZH1.8748@newssvr25.news.prodigy.com>
Source record: 92446

Have been on the Bay of "E", and found myself a wattmeter -"Sierra"
great instrument WITH SLUG (4 power settings, range from 2-30 MHz!)
, and bought for 75 bux with shipping! Was listed (in all places), on
the 2 METER page! , and less than 13 hours to be bought- no bids!
Yet, going to the Bird (oh , exulted one!) listings, see bids for
the following:
2-30 mHz slug, range -- 50 KW, bid on that is 36.99
2-30 mHz slug range -- 25 KW, bid on this is 60.00
2-30 mHz slug range -- 60 KW (hey, this aint even normal for the
meters)! Bid 31.00.
If this the new norm that is to bring technical compentance to amateur
radio, then I fear for it's existance!
And, there is a Struthers (similar to the Sierra) for bid, with 3 slugs
(each with 4 power levels, good to around 400 mHz), no BIDS (opens at
100 bux)! And the guy auctioning it, doesnt seem to know SQUAT about
what it even good for!
Beginning to think that Darwin had it BACKWARDS !! Regression of the
Species! Jim NN7K

326. Re: Finally!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 03:44:25 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <VIydnX-_guUEKm3dRVn-vw@adelphia.com>
Source record: 92447

Ed Cregger wrote:
> I was finally able to record MIDI drums, analog audio guitar and analog
> audio bass with Sonar 3 yesterday. You have no idea how happy I am at the
> moment.
>
> It still needs a lot of work, but at least I'm on my way. Thanks to all of
> those that helped or offered to help. Much appreciated.

HeHe, I thinks ya got the wrong group Ed! 8^)

- Mike -

327. Re: Finally!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 03:57:06 UTC
From: Ed Cregger <ecregger@homtail.com>
Message-ID: <ccqdrh01oil@enews3.newsguy.com>
Source record: 92449

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:VIydnX-_guUEKm3dRVn-vw@adelphia.com...
> Ed Cregger wrote:
> > I was finally able to record MIDI drums, analog audio guitar and analog
> > audio bass with Sonar 3 yesterday. You have no idea how happy I am at
the
> > moment.
> >
> > It still needs a lot of work, but at least I'm on my way. Thanks to all
of
> > those that helped or offered to help. Much appreciated.
>
> HeHe, I thinks ya got the wrong group Ed! 8^)
>
> - Mike -
>

Yup! I didn't know my aim was that bad. 8>)

Ed Cregger, NM2K

328. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 04:16:56 UTC
From: j999w@aol.com
Message-ID: <20040711001656.23811.00001563@mb-m28.aol.com>
Source record: 92448

Once you've finsished installing
>the second beam and the switching don't forget to point it toward
>Southern California during band openings - I've got Illinois, Iowa and
>Michigan but no Wisconsin .... yet, hopefully your new setup
>will change that 8-}
>
>73 & best of luck,
>Howard

Thanks for input, will give it a whirl.

Hearing bursts from AF6O DM14 right now, but no QSO yet.

CU on the band !

jw

329. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 07:53:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lir1f052abevbvspu0rgd80fmc6fv48v0k@4ax.com>
Source record: 92450

On Wed, 07 Jul 2004 17:44:58 -0400, Albert <pass@pass.com> wrote:
>How much gain (dbd) should I expect and about what take off angle will
>I have?

Hi Al,

Contrary to Wes' results, I do not find much more than 13dBi, and certainly not from your proposed huge implementation running out towards 50 wavelengths. In fact, I find antennas that are a tenth of that (5M) have about as much gain as will be found.

My matrix of testing shows that doubling to 10 wavelengths and doubling again to 20 wavelengths brings no further gain (except for some opportunistic outliers).

As a variation upon a theme, I decided to play with uptilt on the 5 wavelength models, lifting the far ends by roughly 25 degrees. The feed point is at 3M, and the far ends are lifted 5M. With this configuration, there is some loss in gain, but the lobe looking at the horizon is easily four times broader. That is, there is an even gain of roughly 11dBi from 14 degrees above the horizon to 34 degrees above the horizon. This occurs for the tips being separated by 30 to 90 degrees (the gain falls to 9dBi with wider separation).

When you separate further, out at 150 degrees between the tips, the broad characteristic collapse, but recaptures gain, and puts it out lower. At such a configuration you might observe 11dBi @ 4 degrees. That lobe is only 3 or 4 degrees tall however.

Considering that common implementations of rhombics rarely go beyond a couple of wavelengths to several, it seems that 20 or 40 or 50 has no future. The law of diminish returns must occur somewhere as you are constantly losing power as it trucks down the length. At that far end, nothing added to little before it hardly piles up gain.

73's
Richard Clark, KB7QHC

330. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 09:49:30 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <tra3HTFq0Q8AFAt9@ifwtech.co.uk>
Source record: 92451

Richard Clark wrote:
>On Wed, 07 Jul 2004 17:44:58 -0400, Albert <pass@pass.com> wrote:
>>How much gain (dbd) should I expect and about what take off angle will
>>I have?
>

>Contrary to Wes' results, I do not find much more than 13dBi, and
>certainly not from your proposed huge implementation running out
>towards 50 wavelengths. In fact, I find antennas that are a tenth of
>that (5M) have about as much gain as will be found.
>
>My matrix of testing shows that doubling to 10 wavelengths and
>doubling again to 20 wavelengths brings no further gain (except for
>some opportunistic outliers).
>
[...]
>Considering that common implementations of rhombics rarely go beyond a
>couple of wavelengths to several, it seems that 20 or 40 or 50 has no
>future.

Those findings of "no further gain" and "no future" are very strange. In the real world, extreme-length rhombics on VHF do have high gain - and also a very distinguished past.

>The law of diminish returns must occur somewhere as you are
>constantly losing power as it trucks down the length.

All types of antenna suffer from diminishing returns, in terms of gain versus absolute size; and it is conceded that extreme-length V-beams and rhombics take up a huge amount of real estate for the gain they generate. But what you seem to be finding is a "gain saturation" effect that is more severe than the normal diminishing returns.

This is a puzzle: would you care to share some antenna files?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

331. Re: Something to break the monotony!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 13:15:26 UTC
From: fractenna@aol.com
Message-ID: <20040711091526.19052.00001703@mb-m06.aol.com>
Source record: 92452

>Beginning to think that Darwin had it BACKWARDS !! Regression of the
>Species! Jim NN7K

The supply and demand on ham related accessories is spotty. Typically takes 2 or 3 listings to find the right buyer(s). No point in essentially giving it away. Of course, listing it in the wrong place isn't any help--a common e-bay issue. Same issues with flea markets.

Keep in mind that the flea markets compete for the same buyers as e-bay, and e-bay presents some path to follow thru on a fair sale. Many folks, like myself, don't go, or almost never go, to fleas anymore. Antiquated in some ways.

Of course, there are few places like the hamster fleas, where you can get both donuts and chilli at 9 AM on a Sunday morning. Now there's an explosive combination for the non-Atkins crowd;-)

73,
Chip N1IR

332. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 16:02:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uto2f0trsohqupgkkmf24eq3cbl7nc1up6@4ax.com>
Source record: 92453

On Sun, 11 Jul 2004 10:49:30 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>This is a puzzle: would you care to share some antenna files?

Hi Ian,

That currently runs to 62 files, some EZNEC+4 - give me something you
are familiar with.

73's
Richard Clark, KB7QHC

333. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 17:05:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <QfD4aBJNNX8AFA5v@ifwtech.co.uk>
Source record: 92454

Richard Clark wrote:
>On Sun, 11 Jul 2004 10:49:30 +0100, "Ian White, G3SEK"
><G3SEK@ifwtech.co.uk> wrote:
>
>>This is a puzzle: would you care to share some antenna files?
>
>Hi Ian,
>
>That currently runs to 62 files, some EZNEC+4 - give me something you
>are familiar with.

I have EZNEC+ v4 too, but that is the only format I can presently read.
Please can you zip and send a selection of files that seem to illustrate
the point?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

334. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 20:22:54 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <40f1a45d_1@news1.prserv.net>
Source record: 92456

What Bill says is correct, and it is easy to implement on 6M. Put one
insulator as close to the mast as possible and another 4 - 5 feet down the
guy. Even though that is close to quarter wave, it isn't resonant unless
you leave out the insulator. That will put the unknown grounded remainder
of the guys almost a half wave away, which is barely acceptable, but better
than having them right up under the antenna.
--
Crazy George
Remove N O and S P A M imbedded in return address
"Bill Turner" <noway@nohow.com> wrote in message
news:vpg2f0d0b3h49q7bk1psfhmlhsskseet42@4ax.com...
> On 11 Jul 2004 01:25:32 GMT, j999w@aol.com (J999w) wrote:
>
> >Will the metalic guys have much effect on the bottom antenna? There will
be
> >about 3 ft of clearance at minimum when turning.
>
> ----------
>
> Three feet is pretty close. I'd break it up with insulators or else use
> Phillystrand for the part close to the antenna. The important thing is
> whether the guy wire is resonant (or close to resonance). If you leave
> it as is, you're always going to wonder if you shoulda.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

335. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 20:45:22 UTC
From: Howard <mensch90249>
Message-ID: <1h93f0dlptvooe2vsf877if9ras70fk7dd@4ax.com>
Source record: 92457

On Sun, 11 Jul 2004 15:22:54 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>What Bill says is correct, and it is easy to implement on 6M. Put one
>insulator as close to the mast as possible and another 4 - 5 feet down the
>guy. Even though that is close to quarter wave, it isn't resonant unless
>you leave out the insulator. That will put the unknown grounded remainder
>of the guys almost a half wave away, which is barely acceptable, but better
>than having them right up under the antenna.
Well, now you & Bill have me wondering if I should go up on the roof
and redo the guys ..... which is no easy task for me. I did however
use lengths that aren't resonant ..... aww heck, it's working now
so I guess I'll leave it alone until the next time I need to
add/change anything else.

336. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 21:22:47 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <8mn8s1-o8r.ln1@p400bob.lse.com.au>
Source record: 92458

Hi Malcolm

The 1/4 will easily cover the 500khz at that frequency.

I'd also suspect that even if you went to (say) a colinear antenna to keep the radition lower to the ground, there would be more than enough signal going "upwards" to the aircraft.I guess you cant actually measure signal strength of received aircraft? You may even find that (say) the lower angle of a 5/8 whip actually helps when the aircraft are some distance away...

I think the most important factor for comms with the winch site is to get both antennas as high as possible and if using a long coax run make it low loss. You have already indicated problems in this area. Possibly the winch install needs to be easy to knock down without damage?

Apologies for not being specific..

Cheers Bob VK2YQA

Malcolm Austin wrote:
> Hi,
> I have an interesting problem which I'd like to put to the newsgroup
> for idea's. Our club (gliding by the way) uses just a few frequencies to
> transmit (AM) and receive on.
>
> The main freq' is 129.975, but we go down to 129.900 and up to 130.400.
>
> We need some new antenna's but I'm wondering what would be the best.
> Currently we use a quarter wave set for 129.975, but this is I'm afraid just
> cut to a length (the lads are pilot's and not Ham's !!)
>
> The quarter wave of course is good in one respect that we are all hopefully
> up in the air so the high angle of radiation helps. It would be good though
> to improve the signal to our winch which is just 950 metres away (3100 feet
> for some!) but over the hill so to speak, so not line of sight. We struggle
> at times on our max 1 watt output to hear each other.
>
> I'm wondering what I can build that will help this low angle but leave the
> high angle still there. Also it would help, to have the VSWR band width
> with us and not against us on all the frequencies. For the winch we have
> limited height available on the top due to hangerage restrictions. If I
> build something big and solid, some one is sure to forget and rip it off
> going into the MT hanger. Our base end is a good old English double decker
> bus, so we have a good ali ground plane some 20 feet in the air. None
> directional capabilities are of course required as we fly 360 degrees around

> the club.
>
> Any thoughts out there?
>
> Many thanks,
>
> Malcolm - Radio Ham and Glider pilot.
>
>

337. AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-11 21:25:30 UTC
From: Malcolm Austin <malcolm.austin4@ntlworld.com>
Message-ID: <efilc.332$Av5.279@newsfe1-gui.ntli.net>
Source record: 92455

Hi,
I have an interesting problem which I'd like to put to the newsgroup for idea's. Our club (gliding by the way) uses just a few frequencies to transmit (AM) and receive on.

The main freq' is 129.975, but we go down to 129.900 and up to 130.400.

We need some new antenna's but I'm wondering what would be the best. Currently we use a quarter wave set for 129.975, but this is I'm afraid just cut to a length (the lads are pilot's and not Ham's !!)

The quarter wave of course is good in one respect that we are all hopefully up in the air so the high angle of radiation helps. It would be good though to improve the signal to our winch which is just 950 metres away (3100 feet for some!) but over the hill so to speak, so not line of sight. We struggle at times on our max 1 watt output to hear each other.

I'm wondering what I can build that will help this low angle but leave the high angle still there. Also it would help, to have the VSWR band width with us and not against us on all the frequencies. For the winch we have limited height available on the top due to hangerage restrictions. If I build something big and solid, some one is sure to forget and rip it off going into the MT hanger. Our base end is a good old English double decker bus, so we have a good ali ground plane some 20 feet in the air. None directional capabilities are of course required as we fly 360 degrees around the club.

Any thoughts out there?

Many thanks,

Malcolm - Radio Ham and Glider pilot.

338. Re: 13 year old Iraqi girl raped by American Soliders

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 00:38:56 UTC
From: Ronald Shu <isssr@yahoo.com>
Message-ID: <40F1DDA0.7020407@yahoo.com>
Source record: 92460
Cross-posted to: rec.photo.technique.nature,rec.photo.technique.people,rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

rjohns@optonline.net wrote:

> 13 year old Iraqi girl raped by American Soliders, posted the first camera footage here
>
You need a little common sense (if you have it) before posting anything
here. rec.photo newsgroups are the places to discuss anything related to
photography, but not political games or hatred rumors.

339. Outlet to TV broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 01:23:44 UTC
From: new_flavour2001@hotmail.com
Message-ID: <88516068.0407111723.7beb3699@posting.google.com>
Source record: 92459

Hi folks,

I have a bit of an issue with a new house i recently moved into and am looking for ideas on how to over come them. (I know running new cable and outlets would be the best solution, however the landlord would have kittens if I did that)

1> all antenna outlets won't work unless one particular point has a powered booster plugged into it.
2> this booster needs to be terminated to a device (ie. tv or vcr)
3> this outlet is behind a wall from where the tv is located.
on the other side of this wall is an outlet, however this is some 6 meters away from the tv.

So, I am looking for a self terminating plug I can put on the end of the powered booster and a device that can transmit the signal from the wall outlet across the room to the tv. At the moment I am running a massive length of cable from the booster to the tv (which I keep tripping over in the middle of the night).

cheers for your help
mark.

340. MFJ-945B Versa Tuner II

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 04:59:30 UTC
From: D & B Rude <brewman@merr.com>
Message-ID: <40f21a60$1_1@newspeer2.tds.net>
Source record: 92461

Hello,
I just bought an MFJ-945B Versa Tuner II withou schematic or manual.
Although it's operaton is easy enough I would like the documentation for it.
If anyone has one and can copy the manual I sure would be happy to pay the
expense to have this doc. Thanks
Dave
KA9SRU

Ohhhh please reply via m,y email adr as I don't always get back to the
nxgrps. 73

341. Re: MFJ-945B Versa Tuner II

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 05:34:43 UTC
From: Aaron Jones <noemail@noemail.com>
Message-ID: <5k84f0l36ifro3cilh2d7anhc50aapesl3@4ax.com>
Source record: 92462

"D & B Rude" <brewman@merr.com> wrote:

>I just bought an MFJ-945B Versa Tuner II withou schematic or manual.
>Although it's operaton is easy enough I would like the documentation for it.

You can download a manual for free from the MFJ website.

342. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 07:31:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lpe4f0p0rn2hcof61s88rl3ip77boini4n@4ax.com>
Source record: 92463

On Sun, 11 Jul 2004 07:53:54 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 07 Jul 2004 17:44:58 -0400, Albert <pass@pass.com> wrote:
>>How much gain (dbd) should I expect and about what take off angle will
>>I have?
>
>Hi Al,
>
>Contrary to Wes' results, I do not find much more than 13dBi, and
>certainly not from your proposed huge implementation running out
>towards 50 wavelengths. In fact, I find antennas that are a tenth of
>that (5M) have about as much gain as will be found.
>
>My matrix of testing shows that doubling to 10 wavelengths and
>doubling again to 20 wavelengths brings no further gain (except for
>some opportunistic outliers).
>
>As a variation upon a theme, I decided to play with uptilt on the 5
>wavelength models, lifting the far ends by roughly 25 degrees. The
>feed point is at 3M, and the far ends are lifted 5M. With this
>configuration, there is some loss in gain, but the lobe looking at the
>horizon is easily four times broader. That is, there is an even gain
>of roughly 11dBi from 14 degrees above the horizon to 34 degrees above
>the horizon. This occurs for the tips being separated by 30 to 90
>degrees (the gain falls to 9dBi with wider separation).
>
>When you separate further, out at 150 degrees between the tips, the
>broad characteristic collapse, but recaptures gain, and puts it out
>lower. At such a configuration you might observe 11dBi @ 4 degrees.
>That lobe is only 3 or 4 degrees tall however.
>
>Considering that common implementations of rhombics rarely go beyond a
>couple of wavelengths to several, it seems that 20 or 40 or 50 has no
>future. The law of diminish returns must occur somewhere as you are
>constantly losing power as it trucks down the length. At that far
>end, nothing added to little before it hardly piles up gain.
>
>73's
>Richard Clark, KB7QHC

Hi All,

Following up with a series of 2 wavelength measurements, it is
interesting to note that of the series of 19 tests, fully 13 of them

evidenced HIGHER gain than those from the 20 wavelength series of measurements.

The step from 2 wavelength to 5 wavelength showed gains consistent with doubling the length of the antenna size for many separations (e.g. 3dB gain, or thereabout). However, it appears that beyond 5 wavelengths (considering my next cardinal point was a doubling to 10 wavelengths) no further gain was observed as a general characteristic.

If I were to judge this at the 180 degree spread and compare against ALL other designs; then the absolute greatest gain for a V design was observed to be slightly less than 4dB. In fact, the 2, 5, 10, and 20 wavelength designs configured as simple dipoles barely differed one from the other (1dB at most, and typically 9.9dBi).

73's
Richard Clark, KB7QHC

343. ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 08:40:41 UTC
From: hunwalla@yahoo.com
Message-ID: <ca70a89.0407120040.7319da2c@posting.google.com>
Source record: 92465
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

Hi all,

My girlfriend's mother lives in an area with poor reception, especially indoors. I recently hung a little metal bracket from suction cups on her bedroom window, stuck one of those 3dB magnetic mount cell antenna's intended for a car roof on it, and ran the wire inside so that she could use the free long distance from home without facing the Florida summer heat. It helps quite a bit, but still cuts out.

I understand that when used as intended the antenna uses the roof or trunk of your car as a ground plane or counterpoise. (Are these the same thing?) Some websites recommend sticking the antenna on a square foot sheet of metal, but as this is Florida in the summer, I think our usual midday rainstorms might blow the whole over. I've also seen some mention of a wire groundplane - just a piece of wire cut to the proper proportion of a wavelength. This would probably stand up better to wind, but I can't find many specifics for this application. The cable and antenna are one piece, so I can't attack the coax shielding directly to the ground plane, but I assume the base of the antenna is a ground plate meant to lie parallel to the car roof and couple with it like a capacitor. Or am I wrong? Does the antenna need the only the mere proximity of a wire of proper length? I don't know.

I've seen a product advertised that looks like what I want, called Sputnik, but I'd really not buy anything else, especially when I could make it myself.

So I guess I need a small ferrous plate to stick to the magnetic bottom, to which I can solder the horizontal wires of the ground plane, but I'm not sure what lengths these need to be, how to position them, or how many to use.

I don't even know what wavelengths I'm dealing with. It's AT&T wireless, and "digital, not GSM", which I assume means PCS, on a Motorolla V60 color. Can someone tell me if I'm looking at 800 Mhz, or 1900, or what?

I considered making a parabolic reflector, but I know neither the wavelengths used nor the precision necessary. (Do I need to adjust it for the specific channels used, both for sending or recieving, or can I just use the center of the 1900 range as an estimate?) Anyway, it would be even worse with the wind than a flat sheetmetal counterpoise.

If the wire ground plane isn't feasable, could someone give me or point me toward some deteils on building a little yagi for cell phone use?

Any direction at all would be appreciated. I have ZERO experience with antennas or radio equipment. I have no idea if I'm even on the right track.

Thanks in advance, Isaac

344. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 09:07:57 UTC
From: Malcolm Austin <malcolm.austin4@ntlworld.com>
Message-ID: <Nxslc.76$KA2.0@newsfe5-gui.ntli.net>
Source record: 92464

Hi Bob,
No problem on not being specific as the whole idea of putting
a message on the newsgroup was to add to the discussion. As they say in
training sessions, no questions are silly questions !! Any yes your right
we do fly some distance away, and coms then would be useful for safety.

I'll have to look out a design for a 5/8 using tubing !

Cheers, Malcolm...

"Bob Bob" <bcnntp@optusnet.com.au> wrote in message
news:8mn8s1-o8r.ln1@p400bob.lse.com.au...
> Hi Malcolm
>
> The 1/4 will easily cover the 500khz at that frequency.
>
> I'd also suspect that even if you went to (say) a colinear antenna to
> keep the radition lower to the ground, there would be more than enough
> signal going "upwards" to the aircraft.I guess you cant actually measure
> signal strength of received aircraft? You may even find that (say) the
> lower angle of a 5/8 whip actually helps when the aircraft are some
> distance away...
>
> I think the most important factor for comms with the winch site is to
> get both antennas as high as possible and if using a long coax run make
> it low loss. You have already indicated problems in this area. Possibly
> the winch install needs to be easy to knock down without damage?
>
> Apologies for not being specific..
>
> Cheers Bob VK2YQA
>
> Malcolm Austin wrote:
> > Hi,
> > I have an interesting problem which I'd like to put to the
newsgroup
> > for idea's. Our club (gliding by the way) uses just a few frequencies
to
> > transmit (AM) and receive on.
> >
> > The main freq' is 129.975, but we go down to 129.900 and up to 130.400.
> >
> > We need some new antenna's but I'm wondering what would be the best.
> > Currently we use a quarter wave set for 129.975, but this is I'm afraid
just

> > cut to a length (the lads are pilot's and not Ham's !!)
> >
> > The quarter wave of course is good in one respect that we are all
hopefully
> > up in the air so the high angle of radiation helps. It would be good
though
> > to improve the signal to our winch which is just 950 metres away (3100
feet
> > for some!) but over the hill so to speak, so not line of sight. We
struggle
> > at times on our max 1 watt output to hear each other.
> >
> > I'm wondering what I can build that will help this low angle but leave
the
> > high angle still there. Also it would help, to have the VSWR band width
> > with us and not against us on all the frequencies. For the winch we
have
> > limited height available on the top due to hangerage restrictions. If I
> > build something big and solid, some one is sure to forget and rip it off
> > going into the MT hanger. Our base end is a good old English double
decker
> > bus, so we have a good ali ground plane some 20 feet in the air. None
> > directional capabilities are of course required as we fly 360 degrees
around
> > the club.
> >
> > Any thoughts out there?
> >
> > Many thanks,
> >
> > Malcolm - Radio Ham and Glider pilot.
> >
> >

345. Antenna for 80m and limited space

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 09:35:35 UTC
From: SM&#65533;IMJ <sm0imj@telia.com>
Message-ID: <HXsIc.4824$dx3.37826@newsb.telia.net>
Source record: 92466

Hi all,
Anyone that have an idea about a wire antenna (folded dipole, trapped
something, etc.) that can be used on a limited space (e.g. on a smaller roof
11*6 meter)?
I mainly use verticals but need something for local (national) 80m QSOs.

cheers,
Hans / SM&#65533;IMJ

346. Re: Any tips on GPA-50 hf vertical?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 10:00:33 UTC
From: Jack <pe2jv@quicknet.nl>
Message-ID: <mn.62d07d47388780bf.15074@quicknet.nl>
Source record: 92467

Na rijp beraad schreef Thomas Krull :
>
> I am using the GPA-50 since about two years and i am very pleased with it,
> my landlord does not allow to set up a beam and i do not have the space to
> set up wire dipoles.
> The GPA-50 covers 10,15,20,40 and 80 meters but not the WARC bands.
> On 10,15 and 20 it uses the included 1/4 wave counterpoises, on 40 the
> included dipole, shortened with the loading coils and on 80 you need to set
> up a counterpoise yourself i.e. metal roof or large sheet of chicken wire,
> the larger the counterpoise on 80 the better.
> I have the GPA-50 on a two meter mast at the courner of my penthouse patio,
> the 1/4 wave radials running to the edge of the roof at an angle of 90
> degrees, so i can walk/use the patio beneath them. SWR on 10 to 20 meters
> is abt. 1:1,2 a little higher at the edges of the bands. I did not cut the
> radials at all.
> The 40 meter dipole is a little tricky since it tends to get "disturbed" by
> metal close by i.e. metal roof. After setting it up the SWR was infinite.
> I got it to 1:3 by cutting small pieces from both legs similar. However
> since i have some metal close by i did not get it below 1:3 but the built
> in tuner of my radio takes care of that without any problems. I did not
> expect the dipole working well, however at nighttime and good conditions i
> am able to work JA with 50 watts from here (North Germany) in CW.
> If you have a metal roof try to connect that as counterpoise on 80 otherwise
> you will have to fiddle with chicken wire or many unbalanced wire
> counterpoises.
> I connected a copper rail running arround the house at the floor of my patio
> and it works quite well on 80 meters. I tuned the antenna to SWR 1:1 at the
> middle of the band by adjusting the tip at the top of the antenna. However
> the range of "good" SWR on 80 is very small so i have to use the tuner of
> the radio again when QSY'ing on the 80 meter band.
> BTW i am located in the 5th floor of the house so the location of the GPA-50
> is quite high from the ground.
> The antenna gives my quite good results running barefoot only (100 Watts) on
> DX and with 10 Watts from my IC-703 i can work Europe with reports ranging
> from S7 to S9+ on 20 meters if conditions are not too bad.
>
> 73s and gl, thomas [DF1HX]
Hello Thomas,
Thank you for your info. I still have to put the gpa50 on a mast
against the wall. It is now on an experimental stand in the garden.
I am going to use a 35m rain gutter as a counterpoise as you suggested
to see how 80m will do.
73's Jack .PE2JV.

--
Dit is een automatische handtekening van MesNews.
Site : http://mesnews.no-ip.com

347. Re: Antenna for 80m and limited space

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 10:33:59 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <xZCdncwgLuqI9G_dRVn-uA@comcast.com>
Source record: 92468

A trap dipole can fit within that length if the ends (80 meter elements)
are folded, e.g.:

http://home.comcast.net/~jdegood/coaxtrap/

73, John NU3E

SMï¿½IMJ wrote:
> Hi all,
> Anyone that have an idea about a wire antenna (folded dipole, trapped
> something, etc.) that can be used on a limited space (e.g. on a smaller roof
> 11*6 meter)?
> I mainly use verticals but need something for local (national) 80m QSOs.
>
> cheers,
> Hans / SMï¿½IMJ
>
>

348. Attenuators - 50 Ohm*GAAS MMIC 50Mhz*3GHz

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 10:39:34 UTC
From: penuries@penuries.com
Message-ID: <95553ff3.0407120239.29783a46@posting.google.com>
Source record: 92469

Dear Sir

We are looking for

Attenuators - 50 Ohm*GAAS MMIC 50Mhz*3GHz

Manufacturer = is = Advance Technology Division Alpha

Can you help ?

BR
Cordialement
Yves SOUSSI

http://www.datasheet1.com

WEB SITE IN FRENCH = http://www.penuries.com
WEB SITE IN ENGLISH = http://www.electronic-components-1.com
@activeweb1

349. News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 11:29:51 UTC
From: fractenna@aol.com
Message-ID: <20040712072951.05741.00001468@mb-m05.aol.com>
Source record: 92470

Also keeps those pesky UFO's in check:-)....

Hmmm..I though cars were better shielded than that.
Article: http://www.guardian.co.uk/crime/article/0,2763,1259138,00.html

73,
Chip N1IR

350. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 11:50:50 UTC
From: 'Doc <ltdoc@yahoo.com>
Message-ID: <v_qdnU4BueCB5m_dRVn-hA@cwis.net>
Source record: 92371
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

Isaac,
Higher does more good than a large groundplane/counterpoise,
and yes, they're the same thing (sort'a). Almost anything will work,
metal sheet/plate, wire, foil, does 'mother's house have rain gutters?
'Doc

351. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 11:51:53 UTC
From: Harry Whitfield <g6auc@invalid.net>
Message-ID: <120720041251527390%g6auc@invalid.net>
Source record: 92372
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

In article <ca70a89.0407120040.7319da2c@posting.google.com>, isaac <hunwalla@yahoo.com> wrote:

> I understand that when used as intended the antenna uses the roof or
> trunk of your car as a ground plane or counterpoise. (Are these the
> same thing?) Some websites recommend sticking the antenna on a square
> foot sheet of metal, but as this is Florida in the summer, I think our
> usual midday rainstorms might blow the whole over.

Pending advice from the specialists, I'd be tempted to try a wire mesh groundplane - something like the stiff wire mesh used in (cake) wire cooling racks, with 1/2 inch mesh.

I don't think the size would be that critical providing the radius was similar to the length of the antenna. Connect the wire to the iron bar to which the antenna is attached.

Harry.

352. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 12:12:10 UTC
From: Andy in NJ <"SHORECOGS at COMCAST DOT NET">
Message-ID: <suidnX4x4YCzHW_dRVn-sw@comcast.com>
Source record: 92373
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

Hmmm.. sounds like she just needs to get a standard land line.

--
73! de Andy KC2SSB
http://shorecogs.tripod.com
AIM: shorecogs

"isaac" <hunwalla@yahoo.com> wrote in message
news:ca70a89.0407120040.7319da2c@posting.google.com...
> Hi all,
>
> My girlfriend's mother lives in an area with poor reception,
> especially indoors. I recently hung a little metal bracket from
> suction cups on her bedroom window, stuck one of those 3dB magnetic
> mount cell antenna's intended for a car roof on it, and ran the wire
> inside so that she could use the free long distance from home without
> facing the Florida summer heat. It helps quite a bit, but still cuts
> out.
>
> I understand that when used as intended the antenna uses the roof or
> trunk of your car as a ground plane or counterpoise. (Are these the
> same thing?) Some websites recommend sticking the antenna on a square
> foot sheet of metal, but as this is Florida in the summer, I think our
> usual midday rainstorms might blow the whole over. I've also seen
> some mention of a wire groundplane - just a piece of wire cut to the
> proper proportion of a wavelength. This would probably stand up
> better to wind, but I can't find many specifics for this application.
> The cable and antenna are one piece, so I can't attack the coax
> shielding directly to the ground plane, but I assume the base of the
> antenna is a ground plate meant to lie parallel to the car roof and
> couple with it like a capacitor. Or am I wrong? Does the antenna
> need the only the mere proximity of a wire of proper length? I don't
> know.
>
> I've seen a product advertised that looks like what I want, called
> Sputnik, but I'd really not buy anything else, especially when I could
> make it myself.
>
> So I guess I need a small ferrous plate to stick to the magnetic
> bottom, to which I can solder the horizontal wires of the ground
> plane, but I'm not sure what lengths these need to be, how to position
> them, or how many to use.
>
> I don't even know what wavelengths I'm dealing with. It's AT&T

> wireless, and "digital, not GSM", which I assume means PCS, on a
> Motorolla V60 color. Can someone tell me if I'm looking at 800 Mhz,
> or 1900, or what?
>
> I considered making a parabolic reflector, but I know neither the
> wavelengths used nor the precision necessary. (Do I need to adjust it
> for the specific channels used, both for sending or recieving, or can
> I just use the center of the 1900 range as an estimate?) Anyway, it
> would be even worse with the wind than a flat sheetmetal counterpoise.
>
> If the wire ground plane isn't feasable, could someone give me or
> point me toward some deteils on building a little yagi for cell phone
> use?
>
> Any direction at all would be appreciated. I have ZERO experience
> with antennas or radio equipment. I have no idea if I'm even on the
> right track.
>
> Thanks in advance, Isaac

353. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 12:56:35 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <r425f0hvpm0tfptkugr11q2bf4vtomcf1p@4ax.com>
Source record: 92374
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

On Mon, 12 Jul 2004 11:51:53 +0000 (UTC), Harry Whitfield
<g6auc@invalid.net> wrote:

>In article <ca70a89.0407120040.7319da2c@posting.google.com>, isaac
><hunwalla@yahoo.com> wrote:
>
>> I understand that when used as intended the antenna uses the roof or
>> trunk of your car as a ground plane or counterpoise. (Are these the
>> same thing?) Some websites recommend sticking the antenna on a square
>> foot sheet of metal, but as this is Florida in the summer, I think our
>> usual midday rainstorms might blow the whole over.
>
>Pending advice from the specialists, I'd be tempted to try a wire mesh
>groundplane - something like the stiff wire mesh used in (cake) wire
>cooling racks, with 1/2 inch mesh.
>
A ground plane need not be solid, as long as the holes are enough
smaller that the wavelength.

>I don't think the size would be that critical providing the radius was
>similar to the length of the antenna. Connect the wire to the iron bar
>to which the antenna is attached.
>
The size is not critical, but ideal would be a radius of 1/4
wavelength. For a 1/4 wave antenna without a loading coil, that would
be the same as the antenna length.

Do the calculation yourself, but 1/4 wave at 800 mHz is about 3.51
inches.

Mounting your antenna on a 7" diameter disk would be optimal. Perhaps
that will be easier mechanically to work with.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

354. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 13:16:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f2902a_8@corp.newsgroups.com>
Source record: 92375

Richard Clark wrote:
> The step from 2 wavelength to 5 wavelength showed gains consistent
> with doubling the length of the antenna size for many separations
> (e.g. 3dB gain, or thereabout). However, it appears that beyond 5
> wavelengths (considering my next cardinal point was a doubling to 10
> wavelengths) no further gain was observed as a general characteristic.

Was this for a copper wire antenna? What happens when you choose
wire loss = zero?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

355. Re: Antenna for 80m and limited space

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 13:28:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f29305$1_8@corp.newsgroups.com>
Source record: 92376

SMï¿½IMJ wrote:

> Hi all,
> Anyone that have an idea about a wire antenna (folded dipole, trapped
> something, etc.) that can be used on a limited space (e.g. on a smaller roof
> 11*6 meter)?
> I mainly use verticals but need something for local (national) 80m QSOs.

For single-band 80m operation, a dipole with loading coils would work
just fine. If you have room for capacitive end "hats", it will decrease
the loading coil inductance required and increase the efficiency. The
ARRL Antenna Book has information on "off-center loaded" dipoles.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

356. Log antenna mounting questions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 15:04:54 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <qMxIc.9796$AT.4648@newssvr25.news.prodigy.com>
Source record: 92377

I want to vertically mount a VHF/UHF log periodic from the rear of the antenna to avoid mast interaction. (Greek mounting) This particular log is a dual boom feedline type and the booms extend to the rear several inches where they short together. My questions are, can I attach to the shorted end of the booms with a metal fixture for mounting to the metal mast? What would be an appropriate spacing from the rear of this antenna to the mast? The feedlind runs parallel with the ground side of the boom and I would like to use a ferrite choke balun on the feedline, is it best placed at the feedpoint at the front of the antenna or out where the coax heads away from the boom?
TIA,
Mike

357. Re: Something to break the monotony!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 15:22:49 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <40F2ACC9.2040802@psu.edu>
Source record: 92378

NN7K - Jim wrote:
> Have been on the Bay of "E", and found myself a wattmeter -"Sierra"
> great instrument WITH SLUG (4 power settings, range from 2-30 MHz!)
> , and bought for 75 bux with shipping! Was listed (in all places), on
> the 2 METER page! , and less than 13 hours to be bought- no bids!
> Yet, going to the Bird (oh , exulted one!) listings, see bids for
> the following:
> 2-30 mHz slug, range -- 50 KW, bid on that is 36.99
> 2-30 mHz slug range -- 25 KW, bid on this is 60.00
> 2-30 mHz slug range -- 60 KW (hey, this aint even normal for the
> meters)! Bid 31.00.
> If this the new norm that is to bring technical compentance to amateur
> radio, then I fear for it's existance!
> And, there is a Struthers (similar to the Sierra) for bid, with 3 slugs
> (each with 4 power levels, good to around 400 mHz), no BIDS (opens at
> 100 bux)! And the guy auctioning it, doesnt seem to know SQUAT about
> what it even good for!
> Beginning to think that Darwin had it BACKWARDS !! Regression of the
> Species! Jim NN7K

The bloom is coming off the Ebay rose. I've looked at a number of their Ham related items, and prices are coming down. There will always be the lucky seller that gets some bizarre price for their equipment.

And yeah, Devolution seems to be running rampant! 8^)

- Mike KB3EIA -

358. Re: Antenna for 80m and limited space

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 15:34:14 UTC
From: zoom <zoom@zoom.com>
Message-ID: <0eb5f0l8q9l7d6c7ipij7g27j3ks1p7dqk@4ax.com>
Source record: 92379

On Mon, 12 Jul 2004 09:35:35 GMT, "SMï¿½IMJ" <sm0imj@telia.com> wrote:

>Hi all,
>Anyone that have an idea about a wire antenna (folded dipole, trapped
>something, etc.) that can be used on a limited space (e.g. on a smaller roof
>11*6 meter)?
>I mainly use verticals but need something for local (national) 80m QSOs.
>
>cheers,
>Hans / SMï¿½IMJ
>
I don't know if this would work very well for local QSOs because of
the vertical component, but this is what I intend to try at my new
QTH:

7M fishing pole with 2M PVC "waste pipe " extension then running
approx 11M wire horizontally from the top, giving horizontal and
vertical polarization components, this all fed against a buried radial
system of course. (Inverted L actually), for the price of some wire
and a fishing pole.

Paul

359. New Program - XTL_SET.exe

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 15:35:39 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ccub4b$nq1$1@titan.btinternet.com>
Source record: 92380

New program XTL_SET.exe

About 60 kilobytes.

This program is both practical and educational. It is based on two loosely-coupled tuned circuits. There are several applications. The circuit of a 'crystal set' is illustrated. Tuned circuit L and C settings and the coefficient of coupling between the two coils can be varied from the keyboard while observing how signal power and voltage levels change at several points during a tuning-up operation.

The signal source is a broadcast transmitter of adjustable power output which radiates a groundwave. The radio path distance and ground path resistivity are also adjustable. A simple inverted-L receiving antenna of given length provides the signal for the receiver.

Download XTL_SET in a few seconds from website below and run immediately.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

360. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 17:16:57 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <dIzIc.16054$ju1.15846@nwrddc04.gnilink.net>
Source record: 92381

"Malcolm Austin" <malcolm.austin4@ntlworld.com> wrote in message
news:efiIc.332$Av5.279@newsfe1-gui.ntli.net...
> Hi,
> I have an interesting problem which I'd like to put to the
newsgroup
> for idea's. Our club (gliding by the way) uses just a few frequencies to
> transmit (AM) and receive on.
>
> The main freq' is 129.975, but we go down to 129.900 and up to 130.400.
>
> We need some new antenna's but I'm wondering what would be the best.
> Currently we use a quarter wave set for 129.975, but this is I'm afraid
just
> cut to a length (the lads are pilot's and not Ham's !!)
>
> The quarter wave of course is good in one respect that we are all
hopefully
> up in the air so the high angle of radiation helps. It would be good
though
> to improve the signal to our winch which is just 950 metres away (3100
feet
> for some!) but over the hill so to speak, so not line of sight. We
struggle
> at times on our max 1 watt output to hear each other.
>
> I'm wondering what I can build that will help this low angle but leave the
> high angle still there. Also it would help, to have the VSWR band width
> with us and not against us on all the frequencies. For the winch we have
> limited height available on the top due to hangerage restrictions. If I
> build something big and solid, some one is sure to forget and rip it off
> going into the MT hanger. Our base end is a good old English double
decker
> bus, so we have a good ali ground plane some 20 feet in the air. None
> directional capabilities are of course required as we fly 360 degrees
around
> the club.
> Any thoughts out there?
>
> Many thanks,
>
> Malcolm - Radio Ham and Glider pilot.

Malcom

I'd suggest that the antenna at the winch can be made more directional without increasing its height. But, you've probably thought of that. It would seem to be a good place to try a simple, small Yagi at the winch.

Jerry

361. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 17:24:01 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <d8h5f09fv7tmtls5282oc468lmcb9cobun@4ax.com>
Source record: 92382

On Mon, 12 Jul 2004 07:31:01 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:
[Earlier stuff snipped]
|
|Following up with a series of 2 wavelength measurements, it is
|interesting to note that of the series of 19 tests, fully 13 of them
|evidenced HIGHER gain than those from the 20 wavelength series of
|measurements.
|
|The step from 2 wavelength to 5 wavelength showed gains consistent
|with doubling the length of the antenna size for many separations
|(e.g. 3dB gain, or thereabout). However, it appears that beyond 5
|wavelengths (considering my next cardinal point was a doubling to 10
|wavelengths) no further gain was observed as a general characteristic.
|
|If I were to judge this at the 180 degree spread and compare against
|ALL other designs; then the absolute greatest gain for a V design was
|observed to be slightly less than 4dB. In fact, the 2, 5, 10, and 20
|wavelength designs configured as simple dipoles barely differed one
|from the other (1dB at most, and typically 9.9dBi).

I must confess that I've tried to follow your path but clearly I'm
lost.

May I suggest that analysis at "180 degree spread", which I take to
mean a dipole, has no relationship to a vee configuration, other than
the wire length. If you will take each leg length and vary the apex
angle to the optimum, you will (should) find that the gain *does*
continue to increase with increased leg length, albeit at a
sub-proportional rate.

For each leg length there is an optimal apex angle. Leaving the angle
fixed and varying the length is *not* a fair test of gain vs. length.

Here are the results I obtained from a quick MultiNEC (NEC-2)
analysis. This at 144 Mhz with height = 20', Sommerfeld Gnd, with
average dirt. #12 AWG Al wire, 20 segments/WL, elevation angle = 4
deg. Source on the middle of a short (3 segment) wire.

Len. (WL) Ang. (deg) Gain (dBi)

10.200 30 19.84
20.193 20 21.97
30.188 16 23.06
40.185 14 23.70
50.182 12 24.10

These data seem resonable and consistant with my expectations.

Wes

362. Re: Log antenna mounting questions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 17:30:25 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <cei5f09ulf40ujn3jpadldp0h7hq0ocsff@4ax.com>
Source record: 92383

On Mon, 12 Jul 2004 15:04:54 GMT, Mike <km6ab@pacbell.net> wrote:

|I want to vertically mount a VHF/UHF log periodic from the rear of the
|antenna to avoid mast interaction. (Greek mounting) This particular log
|is a dual boom feedline type and the booms extend to the rear several
|inches where they short together. My questions are, can I attach to the
|shorted end of the booms with a metal fixture for mounting to the metal
|mast?

Yes.

|What would be an appropriate spacing from the rear of this antenna
|to the mast?

Farther is likely better, but modeling it would be better still.

|The feedlind runs parallel with the ground side of the boom
|and I would like to use a ferrite choke balun on the feedline, is it
|best placed at the feedpoint at the front of the antenna or out where
|the coax heads away from the boom?

I would put it at the feed and if possible run the coax through the
boom. If you can run it throught the boom, then you probably don't
even need the balun.

Wes

363. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 18:00:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10f5kekpid73nd1@corp.supernews.com>
Source record: 92384
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

If the groundplane as suggested doesn't do the trick, get an antenna that's designed to be mounted on the rear window, rather than the roof. That sort of antenna should be able to function properly without a ground plane. Another tip for either kind of antenna is to move the antenna in very small increments while watching the phone's signal strength indicator. A distance of a few inches can make a big difference when multipath propagation is present. If possible, find a general area where the signal strength isn't overly sensitive to antenna placement. If you can't, you either need to very carefully place it at a "sweet spot" (and hope the spot doesn't move when the wind blows), or use a directional antenna.

Roy Lewallen, W7EL

364. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 19:27:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <djn5f0t6bkbl43u3n1gsbsr3sbsvoiop4j@4ax.com>
Source record: 92385

On Mon, 12 Jul 2004 10:24:01 -0700, Wes <n7ws@_yahoo.com> wrote:

>I must confess that I've tried to follow your path but clearly I'm
>lost.
>
>May I suggest that analysis at "180 degree spread", which I take to
>mean a dipole, has no relationship to a vee configuration, other than
>the wire length.

Of course, but with 180 degrees of spread it remains a basis of
comparison and as a basis of comparison, by varying the length of each
arm (measured in wavelengths, ï¿½ to accomodate matching) 2/5/10/20
wavelengths barely offered more than 1dB variation.

Logically, it follows that some angle less than 180 degrees will show
no radical departure from these observations. Continuing to decimate
the spread will exhibit some spectrum of variation with few radical
step-wise jumps. Once we enter into the sphere of conventional
expectations of what a V antenna "should" look like, it is unlikely
that we will arrive at a condition that springs out suddenly to take
up the difference between my data and yours.

> If you will take each leg length and vary the apex
>angle to the optimum, you will (should) find that the gain *does*
>continue to increase with increased leg length, albeit at a
>sub-proportional rate.

I have done this about 80 times at 10 degree increments. As such,
gain is not a fluid thing (whereas drive Z is). Again, compared to
the dipole arrangement (180 degree spread at whatever arm length),
this then changes no more than 4dB above and certainly dives beneath -
again, all in part due to the variation in spread.

>For each leg length there is an optimal apex angle. Leaving the angle
>fixed and varying the length is *not* a fair test of gain vs. length.

I've done both in a full matrix - fairness is explicit.

>Here are the results I obtained from a quick MultiNEC (NEC-2)
>analysis. This at 144 Mhz with height = 20', Sommerfeld Gnd, with
>average dirt. #12 AWG Al wire, 20 segments/WL, elevation angle = 4
>deg. Source on the middle of a short (3 segment) wire.
>
>Len. (WL) Ang. (deg) Gain (dBi)
>
>10.200 30 19.84
>20.193 20 21.97

>30.188 16 23.06
>40.185 14 23.70
>50.182 12 24.10
>
>These data seem resonable and consistant with my expectations.
>
>Wes

Hi Wes,

I report my findings and you report yours.

I would note, however, that EZNEC+ is being used for its virtue of a 1500 segment ability (very necessary I can only suppose), and to which the program automatically prompts me when the segments per wavelength fall below a "conservative" suggested count. I also observed cautions about wires attaching at acute angles and practiced the remedy of a split source. There is no amplifying discussion as to what an "acute" angle is, and to what degree accuracy is impacted so I can only surmise that our differences are a difference in implementation.

Mathematically, an acute angle is less than 90 degrees, but experientially, this is hardly a radical separation. 5 degrees is admittedly acute, but I have no basis to confirm if the split source is adquate to achieve accurate results as the Help suggests it may be (or may not).

However, there still remains the rule of diminishing returns. Doubling the length must ultimately fail to perform. I am sure with scrutiny, the differences will reveal themselves in either pilot error, or implementation differences. I will examine further. Not much left to argue, is there? In other words, hardly worth 600 postings to gum into submission. ;-)

73's
Richard Clark, KB7QHC

365. Long wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 21:42:26 UTC
From: James <jrapier@dcr.net>
Message-ID: <cBDIc.89$jY4.71@fe39.usenetserver.com>
Source record: 92387

I can barely spell antenna but I was thinking of putting up a long wire antenna outside for a shortwave receiver I have. My questions are these.

How long should it be?
Does it need to be vertical, horizontal or somewhere in between? Which is best?
What about guage of the wire? Radio Shack has a 70 foot stranded copper wire 14 guage with a couple of insulators as some sort of kit.
Could something like this be strung on steel insulated fence posts that are normally used for keeping livestock from wandering? That would put it close to the ground. I know that higher is always better.

I have a 35+ year old transistor Japanese shortwave radio that had a broken (and lost) whip antenna. I installed another whip with a little soldering, bought a generic ac adapter and lo and behold it worked pretty well. A little hum but acceptable. I thought that it would not cost a lot of dough to put an outside long wire antenna out there to receive some international stuff. It brought in some with just the whip but quality of signal should be much better in my estimation. I have lotsa room on the place here.

Any answers, tips or suggestions would be welcome. I thought if it worked out I might invest in a new shortwave receiver of some kind. Any suggestions as to that would also be appreciated. I have been thinking of a Grundig 800 but only done limited research so far.

366. Re: Antenna for 80m and limited space

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 22:08:47 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <40F30BEF.1080309@myrealbox.com>
Source record: 92388

SMï¿½IMJ wrote:
> Hi all,
> Anyone that have an idea about a wire antenna (folded dipole, trapped
> something, etc.) that can be used on a limited space (e.g. on a smaller roof
> 11*6 meter)?
> I mainly use verticals but need something for local (national) 80m QSOs.
>
> cheers,
> Hans / SMï¿½IMJ

Paul's idea for the inverted-L is good, but I have found that length of wire isn't effective use on 80 Meters. You could probably make it work but there is no telling how well it will work.

I had one once that was a similar arrangement. Fed at ground level it first went up about 30 Ft., then east for about 20 feet to a tree branch, and then south for the rest of the run. Overall it was about 96 feet long. I fed it with a small choke on 40 meters and added a series capacitor (250pF variable) on 80. A little pruning got SWR down on 40 meters and the variable capacitor took care of 80. I buried about 5 randon length wires (20-30 Ft) under the feed point.

Cecil suggested a loaded dipole and John suggested a trap dipole. Both give a shortening effect and the trap dipole gives you more bands to work. I used a home made trap dipole for 10-15-20-40 for many years and it worked great. Once it was set up there was no tuning on any of the bands. The only drawback is that in order to set it up right you should have a grid dip meter and a antenna analyzer on hand. You can do it with out them but it's much more difficult. It's usually easier to borrow the necessary equipment from a friend. I would expect that the tuning for 80 meters would be a little touchier than the higher bands.

To help increase your available space you could raise the center of the antenna in an inverted-v. Instead of having only 5.5 meters each side of center, a 5.5 meter mast would extend that to about 7.5 meters. Not a huge gain, but with the longer length, the coil for a loaded dipole could be smaller making it more efficint.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

367. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 22:36:47 UTC
From: Malcolm Austin <malcolm.austin4@ntlworld.com>
Message-ID: <3oEIc.1091$cz3.253@newsfe2-gui.ntli.net>
Source record: 92386

Hi Jerry,
yes had thought of going directional, but have some small
problem. Him up stairs, keeps changing the wind so we have to move the
winch about the field. Some times this can be by 180 degrees ! So we are
restricted to omni-directional...

Cheers, Malcolm...

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:dIzIc.16054$ju1.15846@nwrddc04.gnilink.net...
>
> "Malcolm Austin" <malcolm.austin4@ntlworld.com> wrote in message
> news:efiIc.332$Av5.279@newsfe1-gui.ntli.net...
> > Hi,
> > I have an interesting problem which I'd like to put to the
> newsgroup
> > for idea's. Our club (gliding by the way) uses just a few frequencies
to
> > transmit (AM) and receive on.
> >
> > The main freq' is 129.975, but we go down to 129.900 and up to 130.400.
> >
> > We need some new antenna's but I'm wondering what would be the best.
> > Currently we use a quarter wave set for 129.975, but this is I'm afraid
> just
> > cut to a length (the lads are pilot's and not Ham's !!)
> >
> > The quarter wave of course is good in one respect that we are all
> hopefully
> > up in the air so the high angle of radiation helps. It would be good
> though
> > to improve the signal to our winch which is just 950 metres away (3100
> feet
> > for some!) but over the hill so to speak, so not line of sight. We
> struggle
> > at times on our max 1 watt output to hear each other.
> >
> > I'm wondering what I can build that will help this low angle but leave
the
> > high angle still there. Also it would help, to have the VSWR band width
> > with us and not against us on all the frequencies. For the winch we
have
> > limited height available on the top due to hangerage restrictions. If I
> > build something big and solid, some one is sure to forget and rip it off
> > going into the MT hanger. Our base end is a good old English double

> decker
> > bus, so we have a good ali ground plane some 20 feet in the air. None
> > directional capabilities are of course required as we fly 360 degrees
> around
> > the club.
> > Any thoughts out there?
> >
> > Many thanks,
> >
> > Malcolm - Radio Ham and Glider pilot.
>
> Malcom
>
> I'd suggest that the antenna at the winch can be made more directional
> without increasing its height. But, you've probably thought of that. It
> would seem to be a good place to try a simple, small Yagi at the winch.
>
> Jerry
>
>

368. Re: Long wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-12 23:08:38 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <XREIc.1989$sj.633@lakeread02>
Source record: 92389

"James" <jrapier@dcr.net> wrote

> How long should it be?
> Does it need to be vertical, horizontal or somewhere in between? Which is
> best?
> What about guage of the wire? Radio Shack has a 70 foot stranded copper
wire
> 14 guage with a couple of insulators as some sort of kit.

That's a good good starting point James.

> Could something like this be strung on steel insulated fence posts that
are
> normally used for keeping livestock from wandering? That would put it
close
> to the ground. I know that higher is always better.

It is indeed, but one of the radio shack "kits" I had 40' up in a tree came down in a hurricane, and annoyingly (to me) worked almost as well lying on the ground. Because of it's length, it still worked in it's desired bands better than an elaborate fan-antenna of two long wires and transformer that did survive the hurricane. A long wire parallel to the ground will have directional aspects to it's reception. The steeper of an angle (but avoid more than about 60 degrees) the less directional it will be.

> I have lotsa room on the place here.

That also implies "quiet" from urban noise, and great for shortwave listening.

You would probably enjoy any of the used Radio Shack DX-series shortwave radios normally available on eBay. A lot less money and some are more capable than anything Grundig made. Of course the Grundigs will pick up nearly anything with the stock whip. But Grundig like many of it's kind were not made for real external antennas - and doing so does often just overloads the input to the detriment of all listening. The old Radio Shack DX series are made for long external antenna usage, as are all table-top/base type communications receivers.

Good listening.

Jack

369. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 02:24:40 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <40f34aaa_3@news1.prserv.net>
Source record: 92390

William:

Look carefully at what you wrote. Couldn't you have achieved the same
results by turning the RF gain down, or shortening your existing antenna?
Noise down, signals down also? WWV gone? Hmmm. Suspicious.

--
Crazy George
Remove N O and S P A M imbedded in return address
"William Mutch" <wcm1@NOSPAM.cornell.edu> wrote in message
news:MPG.1b5c5255e586d7e69897b2@newsstand.cit.cornell.edu...
> Over the weekend I cobbled one of these together
>
> http://www.greertech.com/hfloop/mymagloop.html
>
> and was rather pleased with the results. My
> version was made on a scrap wood hexangonal armature which allowed
> approimately 15' 4" total loop circumference of salvaged RG58/u. It took
> just over an hour to build, start to finish.
> I tested it mounted on the roof of my camper van feeding a Sat800.
> With my Barker and Williamson VR300 pi section tuner it has a frequency
> range from about 2.3 Mhz up to somewhere around 26 Mhz...in short all of
> the usual shortwave frequencies of interest. The tuning is fairly sharp
> in all frerquency ranges, but not so much so as to be touchy. The Sat800
> seems to have ample sensitivity to make up for the difference of
> strength compared to the high long wire I usually use.
> The most dramatic effect is the quiet! The noise floor usually
> runs about S4 on the meter with the high long wire, but was reduced to a
> barely registering S1 with the sheilded loop. An S6 signal is
> completely in the clear. There is usually a band of RF garbage in my
> neighborhood extending from about 17 Mhz up to about 23 Mhz which
> normally obliterates the 15 and 13 meter bands. With the shielded loop
> this was very much reduced...there wasn't a lot of activity on these
> bands at the hours I was listening. I never heard WWV at 20 Mhz but did
> hear one broadcaster in 13M band and some CW on 15.
> I'm taking the van on vacation to the Shenandoah region next week,
> will try this antenna out in the field, nd give further impressions when
> I get back.
>
>
>
> AR de KC2LVQ

370. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 04:33:42 UTC
From: Howard <mensch90249>
Message-ID: <0ko6f09196kvh61uu563ceb27b6voevqno@4ax.com>
Source record: 92391

On Mon, 12 Jul 2004 19:04:38 -0700, Bill Turner <noway@nohow.com>
wrote:

>On Sun, 11 Jul 2004 13:45:22 -0700, Howard <mensch90249> wrote:
>
>>Well, now you & Bill have me wondering if I should go up on the roof
>>and redo the guys ..... which is no easy task for me. I did however
>>use lengths that aren't resonant ..... aww heck, it's working now
>>so I guess I'll leave it alone until the next time I need to
>>add/change anything else.
>
>_____
>
>Ok, if you're going to leave it up as is, at least do one simple test.
>Monitor the SWR as you rotate it through 360 degrees. If there is no
>change at all, you can sleep well at night. If you get radical swings
>in SWR, break up the guys ASAP. If you get "moderate" swings in SWR...
>try do define "moderate". :-)

Bill,
Did that test when I installed the antenna and there were no changes
at all points tested (checked every 45 degrees). Funny thing is that
I've seen insulators used and know why they're used ..... it just
didn't occur to me to consider them as I was fixated on using a
non-resonant guy length. Let's just call me lucky this time and
lesson learned for the future.

As to defining moderate.....I'm not biting 8-}

Howard

371. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 05:12:37 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <9bKIc.51770$6e7.8812@nwrddc03.gnilink.net>
Source record: 92392

Malcom

It seems that you've got a problem on your hands. The base station must cover the hemisphere and have good gain at or slightly below the horizon. I suspect thats a very difficult pattern to produce with linear polarization. A QHA (helical) antenna might be an interesting antenna to try. But, it wouldnt be an easy antenna to develop and construct, like the J-pole or discone.

Jerry

"Malcolm Austin" <malcolm.austin4@ntlworld.com> wrote in message news:3oEIc.1091$cz3.253@newsfe2-gui.ntli.net...
> Hi Jerry,
> yes had thought of going directional, but have some small
> problem. Him up stairs, keeps changing the wind so we have to move the
> winch about the field. Some times this can be by 180 degrees ! So we are
> restricted to omni-directional...
>
> Cheers, Malcolm...
>
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:dIzIc.16054$ju1.15846@nwrddc04.gnilink.net...
> >
> > "Malcolm Austin" <malcolm.austin4@ntlworld.com> wrote in message
> > news:efiIc.332$Av5.279@newsfe1-gui.ntli.net...
> > > Hi,
> > > I have an interesting problem which I'd like to put to the
> > newsgroup
> > > for idea's. Our club (gliding by the way) uses just a few frequencies
> to
> > > transmit (AM) and receive on.
> > >
> > > The main freq' is 129.975, but we go down to 129.900 and up to
130.400.
> > >
> > > We need some new antenna's but I'm wondering what would be the best.
> > > Currently we use a quarter wave set for 129.975, but this is I'm
afraid
> > just
> > > cut to a length (the lads are pilot's and not Ham's !!)
> > >
> > > The quarter wave of course is good in one respect that we are all
> > hopefully

> > > up in the air so the high angle of radiation helps. It would be good
> > though
> > > to improve the signal to our winch which is just 950 metres away (3100
> > feet
> > > for some!) but over the hill so to speak, so not line of sight. We
> > struggle
> > > at times on our max 1 watt output to hear each other.
> > >
> > > I'm wondering what I can build that will help this low angle but leave
> the
> > > high angle still there. Also it would help, to have the VSWR band
width
> > > with us and not against us on all the frequencies. For the winch we
> have
> > > limited height available on the top due to hangerage restrictions. If
I
> > > build something big and solid, some one is sure to forget and rip it
off
> > > going into the MT hanger. Our base end is a good old English double
> > decker
> > > bus, so we have a good ali ground plane some 20 feet in the air. None
> > > directional capabilities are of course required as we fly 360 degrees
> > around
> > > the club.
> > > Any thoughts out there?
> > >
> > > Many thanks,
> > >
> > > Malcolm - Radio Ham and Glider pilot.
> >
> > Malcom
> >
> > I'd suggest that the antenna at the winch can be made more directional
> > without increasing its height. But, you've probably thought of that.
It
> > would seem to be a good place to try a simple, small Yagi at the winch.
> >
> > Jerry
> >
> >
>
>

372. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 05:49:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4dt6f0ps91ee0plmkdr7i6eumst72iv80n@4ax.com>
Source record: 92393

On Mon, 12 Jul 2004 10:24:01 -0700, Wes <n7ws@_yahoo.com> wrote:

>Here are the results I obtained from a quick MultiNEC (NEC-2)
>analysis. This at 144 Mhz with height = 20', Sommerfeld Gnd, with
>average dirt. #12 AWG Al wire, 20 segments/WL, elevation angle = 4
>deg. Source on the middle of a short (3 segment) wire.
>
>Len. (WL) Ang. (deg) Gain (dBi)
>
>20.193 20 21.97

Hi Wes,

For this particular design (except mine is elevated 5 wavelengths), I
pushed for 1 degree resolution, with a split source, with tapered
segments (1023 all told) and I still fall short, but also well ahead
of my earlier reports:
18.5dBi @ 3 degrees w/3 degree lobe width

73's
Richard Clark, KB7QHC

373. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 06:02:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10f6unr1jinl6c3@corp.supernews.com>
Source record: 92394

This analysis should be done in free space, not over ground. Propagation to the moon should avoid reflection from the ground, and in any case EZNEC's flat, infinite-extent ground model isn't representative of what the signal would encounter in real life.

One other comment. As a dipole gets longer, the lobes move closer and closer to the direction of the wire. Bending the dipole into a vee shape aligns pairs of the lobes so they point in the same direction, i.e., along the vee axis. That's why the optimum angle becomes less and less as the wires get longer, and why a dipole model isn't necessarily representative of what a long vee will do.

Roy Lewallen, W7EL

Richard Clark wrote:
>
> For this particular design (except mine is elevated 5 wavelengths), I
> pushed for 1 degree resolution, with a split source, with tapered
> segments (1023 all told) and I still fall short, but also well ahead
> of my earlier reports:
> 18.5dBi @ 3 degrees w/3 degree lobe width
>
> 73's
> Richard Clark, KB7QHC

374. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 06:05:56 UTC
From: Bill Radio <Wireless@MountainWirelessNOSPAN.com>
Message-ID: <10f6uu1qevcor1b@corp.supernews.com>
Source record: 92395
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

Isaac,
All these are acceptable suggestions, but if your antenna base is truly magnetic, an inverted 1-pound coffee can makes a perfect ground plane. Larger would be slightly better, but beyond that, "finding the sweet spot" is probably the best advice of all. Make sure that the antenna matches the band being used: I believe AT&T is 800 MHz for 'digital' in FL, therefore you should have a 800 MHz antenna. Do a google search for Cellular Yagis if necessary, but I find most of these at www.canyonriver.com, and www.antenna.com.

Bill Radio NA&#65533;NA
Click for Western U.S. Wireless Reviews at:
http://www.mountainwireless.com

"isaac" <hunwalla@yahoo.com> wrote in message
news:ca70a89.0407120040.7319da2c@posting.google.com...
> Hi all,

>
> I understand that when used as intended the antenna uses the roof or
> trunk of your car as a ground plane or counterpoise. (Are these the
> same thing?)
>
> I don't even know what wavelengths I'm dealing with. It's AT&T
> wireless, and "digital, not GSM", which I assume means PCS, on a
> Motorolla V60 color. Can someone tell me if I'm looking at 800 Mhz,
> or 1900, or what?
>

375. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 07:24:47 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <h937f0pbc53lgi6imjnml0etb4ehmbb3ct@4ax.com>
Source record: 92396

On Mon, 12 Jul 2004 22:36:47 GMT, "Malcolm Austin"
<malcolm.austin4@ntlworld.com> wrote:

>Hi Jerry,
> yes had thought of going directional, but have some small
>problem. Him up stairs, keeps changing the wind so we have to move the
>winch about the field. Some times this can be by 180 degrees ! So we are
>restricted to omni-directional...

How about a discone? They cover a very wide range of frequencies and
are *relatively inexpensive. Probably on the order of $50 or so. The
simple Radio Shack model covers from about the FM broadcast band which
is well below the aviation band to over 440 MHz and are
omni-directional. There is a null directly overhead, but they seem to
do well. Otherwise I'd go with a ground plane and use a very large
diameter vertical element compared tot he regular size.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

>
>Cheers, Malcolm...
>

376. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 07:37:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ru27f0lga3kqrakped1nk51jgml5a86l16@4ax.com>
Source record: 92397

On Mon, 12 Jul 2004 23:02:30 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

Hello Roy,

There are any number of problems with your comments:

>This analysis should be done in free space, not over ground.

The application demands ground as an inescapable reality of design.
Designing in free space, unless you expand upon your commentary, is
meaningless. In other words, the product of a free space analysis
offers no more insight that this blighted version. Your comments that
follow fairly shout this as a wholly undecipherable problem.

>Propagation to the moon should avoid reflection from the ground,

This has already been offered as a cautionary. However, as a
cautionary it says nothing about the impact of application aside from
the introduction of noise (ground temperature) which lies outside of
EZNEC's constraints. There would undoubtedly be issues of ducting,
much less diffraction at the air/space boundary - and these too are
within the domain of propagation modelers which is not what I perceive
EZNEC to be. However, propagation modelers do work from antenna
characteristics and it would seem this work is adequate to that
(anticipated) task. The propagation modelers I am used to seem to
expect ground considerations rolled into the antenna characteristics.

>and in any case EZNEC's flat, infinite-extent ground model isn't representative of what
>the signal would encounter in real life.

No doubt, but this still says nothing on which to hang a hat. The
valuations offered range from 10 to 22dBi. Are these values off by
3dB, 10dB, 100dB? Rather than having a good low angle response, the
actual response is straight up? What is the context of your warning?
If they are not representative do we have an unimaginable response?
If the EZNEC is sufficient for Rhombics at HF, certainly at VHF the
wavelength horizon is much further off and earth appears that much
flatter. Earth curvature exists for all applications and your
warnings would suggest no model is useful.

73's
Richard Clark, KB7QHC

377. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 08:02:40 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <BhYclDJgc58AFA4R@ifwtech.co.uk>
Source record: 92399

Roy Lewallen wrote:
>This analysis should be done in free space, not over ground.
>Propagation to the moon should avoid reflection from the ground, and in
>any case EZNEC's flat, infinite-extent ground model isn't
>representative of what the signal would encounter in real life.
>
Very long rhombics and vees (for any frequency) cannot ignore the existence of ground. On the contrary, they rely on it, so a model including ground reflection is correct for this antenna. This includes the use of these antennas for EME in former days.

Apologies to Richard for not responding to the antenna files that he kindly sent across, a few days ago (other deadlines). The discussion has moved on in the meantime, so it makes more sense for me to jump in again here.

>One other comment. As a dipole gets longer, the lobes move closer and
>closer to the direction of the wire. Bending the dipole into a vee
>shape aligns pairs of the lobes so they point in the same direction,
>i.e., along the vee axis. That's why the optimum angle becomes less and
>less as the wires get longer,

That would have been my first point in response to Richard's findings. As a single end-fed wire gets longer, its radiation pattern becomes predominantly X-shaped, with the four main lobes moving closer and closer to the line of the wire itself. The optimum angle for a V-beam is chosen to make the main lobes of the two wires overlap exactly, so they reinforce as strongly as possible in the forward direction. If the V angle is kept constant and only the leg length is increased, the maximum obtainable forward gain will not be realized.

I don't have any of the classic references for optimum design of V-beams or rhombics to hand; but unless Richard and I are both doing it totally wrong, the V-beam does seem to show some reluctance to increase in gain by a whole 3dB for each doubling of the leg length (and the rhombic would do the same).

However, that doesn't detract from the reputation of the rhombic in particular as "the king of HF antennas" - if you have the real estate and can tolerate the fixed direction, the rhombic can give several dB more forward gain than almost any other practical antenna.

All of this prompted me to try to model the 50-wavelength-per-side rhombic that we used for EME, way back when. My recollection is that the included angle was 12deg, but the original notes are long gone.

EZNEC+ v4 predicts the spectacularly narrow main lobe that one would expect, and it also confirms the well-known finding that if you terminate the rhombic at the far end, the pattern changes from bi-directional to unidirectional but the forward gain also drops by about 3dB. However, 30-40 years ago it was believed that it is not important to terminate an extremely long rhombic "because most of the forward-traveling wave has been lost to radiation before it arrives at the far end." The model categorically negates that belief - even at 50wl/side, termination has much the same effect as for shorter rhombics.

Unfortunately the segmentation density in my model (7.5 segs/wl) is too sparse to be confident about the absolute value of the gain. Normally one should both increase and decrease the segmentation density to confirm that the predictions remain stable; but this is not possible because this enormous antenna has already used 1499 out of the 1500 allowable segments.

Since I can't be confident about the gain predictions, there is no point in quoting and discussing them here - we already chase enough wild geese in this ng.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

378. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 08:07:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10f761s7a0or0cc@corp.supernews.com>
Source record: 92398

Sorry, I don't have the time or inclination to get into another protracted "last man standing is the winner" diatribe. I'll leave it to the readers to evaluate what I've written and decide whether or not it makes sense, or whether they'll choose instead to be persuaded by your objections. Either is fine with me.

Roy Lewallen, W7EL

Richard Clark wrote:
> On Mon, 12 Jul 2004 23:02:30 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> Hello Roy,
>
> There are any number of problems with your comments:
>
>
>>This analysis should be done in free space, not over ground.
>
>
> The application demands ground as an inescapable reality of design.
> Designing in free space, unless you expand upon your commentary, is
> meaningless. In other words, the product of a free space analysis
> offers no more insight that this blighted version. Your comments that
> follow fairly shout this as a wholly undecipherable problem.
>
>
>>Propagation to the moon should avoid reflection from the ground,
>
>
> This has already been offered as a cautionary. However, as a
> cautionary it says nothing about the impact of application aside from
> the introduction of noise (ground temperature) which lies outside of
> EZNEC's constraints. There would undoubtedly be issues of ducting,
> much less diffraction at the air/space boundary - and these too are
> within the domain of propagation modelers which is not what I perceive
> EZNEC to be. However, propagation modelers do work from antenna
> characteristics and it would seem this work is adequate to that
> (anticipated) task. The propagation modelers I am used to seem to
> expect ground considerations rolled into the antenna characteristics.
>
>
>>and in any case EZNEC's flat, infinite-extent ground model isn't representative of what
>>the signal would encounter in real life.
>

>
> No doubt, but this still says nothing on which to hang a hat. The
> valuations offered range from 10 to 22dBi. Are these values off by
> 3dB, 10dB, 100dB? Rather than having a good low angle response, the
> actual response is straight up? What is the context of your warning?
> If they are not representative do we have an unimaginable response?
> If the EZNEC is sufficient for Rhombics at HF, certainly at VHF the
> wavelength horizon is much further off and earth appears that much
> flatter. Earth curvature exists for all applications and your
> warnings would suggest no model is useful.
>
> 73's
> Richard Clark, KB7QHC

379. Re: Long wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 13:07:20 UTC
From: "Randy A. Hefner" <randy_NO_SPAM_PLEASE_@murs-usa.com>
Message-ID: <2li4smFci6stU1@uni-berlin.de>
Source record: 92400

"Jack Painter" <223bthp@cox.net> wrote in message
news:XREIc.1989$sj.633@lakeread02...
>
>
> You would probably enjoy any of the used Radio Shack DX-series shortwave
> radios normally available on eBay. A lot less money

DX-440 is a great little radio! Will pickup sideband and CW.

380. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 14:56:16 UTC
From: - XC - <nobody@home.net>
Message-ID: <vvednUbq1tePZW7dRVn-vA@comcast.com>
Source record: 92401

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:40f34aaa_3@news1.prserv.net...
> William:
>
> Look carefully at what you wrote. Couldn't you have achieved the same
> results by turning the RF gain down, or shortening your existing antenna?
> Noise down, signals down also? WWV gone? Hmmm. Suspicious.

I'll answer for him, ...No and No.
Receiving loops aren't about signal strength they're about improved Signal
to Noise **Ratio**.
Not hearing 20 MHz WWV at the hours he said he was listening (late eve?)
means nothing as that band folds late at night or propagation simply may not
have been favoring a path between them at that time.
Try some Google-searching for receiving loops, lots of info.

XC

381. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 15:37:10 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <40f4048a_1@news1.prserv.net>
Source record: 92402

Howard:

See, here's the problem. If those guys are tied to a metal mast on one end
and ground on the other, then you have no idea what the electrical length
is. And, if the mast is grounded as it is supposed to be, then the mast,
ground and guy form a loop which is dangerous even in the "non-resonant"
mode. And the SWR test is a very insensitive test. Although if forward
gain is the primary criteria, then you are likely OK, but on HF, where front
to back and front to side ratios are important, then guy reradiation can be
significant enough to mess those up without showing up on SWR.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Howard" <mensch90249> wrote in message
news:0ko6f09196kvh61uu563ceb27b6voevqno@4ax.com...
> On Mon, 12 Jul 2004 19:04:38 -0700, Bill Turner <noway@nohow.com>
> wrote:
>
> >On Sun, 11 Jul 2004 13:45:22 -0700, Howard <mensch90249> wrote:
> >
> >>Well, now you & Bill have me wondering if I should go up on the roof
> >>and redo the guys ..... which is no easy task for me. I did however
> >>use lengths that aren't resonant ..... aww heck, it's working now
> >>so I guess I'll leave it alone until the next time I need to
> >>add/change anything else.
> >
> >____
> >
> >Ok, if you're going to leave it up as is, at least do one simple test.
> >Monitor the SWR as you rotate it through 360 degrees. If there is no
> >change at all, you can sleep well at night. If you get radical swings
> >in SWR, break up the guys ASAP. If you get "moderate" swings in SWR...
> >try do define "moderate". :-)
>
>
> Bill,
> Did that test when I installed the antenna and there were no changes
> at all points tested (checked every 45 degrees). Funny thing is that
> I've seen insulators used and know why they're used ..... it just
> didn't occur to me to consider them as I was fixated on using a
> non-resonant guy length. Let's just call me lucky this time and
> lesson learned for the future.
>
> As to defining moderate.....I'm not biting 8-}

>
> Howard

382. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 15:42:03 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncf80og.bjt.bit-bucket@walnut.config.com>
Source record: 92403

```
On Tue, 13 Jul 2004 10:56:16 -0400, - XC - hath writ:
>
> "Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
> news:40f34aaa_3@news1.prserv.net...
>> William:
>>
>> Look carefully at what you wrote. Couldn't you have achieved the same
>> results by turning the RF gain down, or shortening your existing antenna?
>> Noise down, signals down also? WWV gone? Hmmm. Suspicious.
>
> I'll answer for him, ...No and No.
> Receiving loops aren't about signal strength they're about improved Signal
> to Noise **Ratio**.

And, receiving loops are about nulling out interfering signals.
Deep nulls has a loop.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK
```

383. Re: ground plane for a magnetic mount cellular antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 15:51:11 UTC
From: WB2JKX <mycall-N0SPAM@arrl.net>
Message-ID: <PxTIc.89993$OB3.15566@bgtnsc05-news.ops.worldnet.att.net>
Source record: 92404
Cross-posted to: alt.cellular.tech,alt.cellular,rec.radio.amateur.antenna

isaac <hunwalla@yahoo.com> wrote in message
news:ca70a89.0407120040.7319da2c@posting.google.com...
> Hi all,
>
> My girlfriend's mother lives in an area with poor reception,
> especially indoors. I recently hung a little metal bracket from
> suction cups on her bedroom window, stuck one of those 3dB magnetic
> mount cell antenna's intended for a car roof on it, and ran the wire
> inside so that she could use the free long distance from home without
> facing the Florida summer heat. It helps quite a bit, but still cuts
> out.
>
> I understand that when used as intended the antenna uses the roof or
> trunk of your car as a ground plane or counterpoise. (Are these the
> same thing?) Some websites recommend sticking the antenna on a square
> foot sheet of metal, but as this is Florida in the summer, I think our
> usual midday rainstorms might blow the whole over. I've also seen
> some mention of a wire groundplane - just a piece of wire cut to the
> proper proportion of a wavelength. This would probably stand up
> better to wind, but I can't find many specifics for this application.
> The cable and antenna are one piece, so I can't attack the coax
> shielding directly to the ground plane, but I assume the base of the
> antenna is a ground plate meant to lie parallel to the car roof and
> couple with it like a capacitor. Or am I wrong? Does the antenna
> need the only the mere proximity of a wire of proper length? I don't
> know.
>
> I've seen a product advertised that looks like what I want, called
> Sputnik, but I'd really not buy anything else, especially when I could
> make it myself.
>
> So I guess I need a small ferrous plate to stick to the magnetic
> bottom, to which I can solder the horizontal wires of the ground
> plane, but I'm not sure what lengths these need to be, how to position
> them, or how many to use.
>
> I don't even know what wavelengths I'm dealing with. It's AT&T
> wireless, and "digital, not GSM", which I assume means PCS, on a
> Motorolla V60 color. Can someone tell me if I'm looking at 800 Mhz,
> or 1900, or what?

"Classic" AT&T wireless was TDMA, on the 800 Mhz band

> I considered making a parabolic reflector, but I know neither the
> wavelengths used nor the precision necessary. (Do I need to adjust it
> for the specific channels used, both for sending or recieving, or can
> I just use the center of the 1900 range as an estimate?) Anyway, it
> would be even worse with the wind than a flat sheetmetal counterpoise.
>
> If the wire ground plane isn't feasable, could someone give me or
> point me toward some deteils on building a little yagi for cell phone
> use?
>
> Any direction at all would be appreciated. I have ZERO experience
> with antennas or radio equipment. I have no idea if I'm even on the
> right track.
>
> Thanks in advance, Isaac

384. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 16:04:52 UTC
From: tdonaly@aol.com
Message-ID: <20040713120452.04880.00001026@mb-m24.aol.com>
Source record: 92405

XC wrote,
>
>I'll answer for him, ...No and No.
>Receiving loops aren't about signal strength they're about improved Signal
>to Noise **Ratio**.

They are? How do they do that?
73,
Tom Donaly, KA6RUH

385. Re: Metal guy effect on 6m beam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 16:34:50 UTC
From: Howard <mensch90249>
Message-ID: <fb28f0ll4urhkmep82lrggttbkaelr08k4@4ax.com>
Source record: 92406

On Tue, 13 Jul 2004 10:37:10 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Howard:
>
>See, here's the problem. If those guys are tied to a metal mast on one end
>and ground on the other, then you have no idea what the electrical length
>is. And, if the mast is grounded as it is supposed to be, then the mast,
>ground and guy form a loop which is dangerous even in the "non-resonant"
>mode. And the SWR test is a very insensitive test. Although if forward
>gain is the primary criteria, then you are likely OK, but on HF, where front
>to back and front to side ratios are important, then guy reradiation can be
>significant enough to mess those up without showing up on SWR.

Thanks for the additional info/perspective. I realize the SWR is only
a portion of the picture, though the only element I can actually
measure. F/B isn't much of an issue for me, from where I live most of
the directions I point my beam has the back pointing to the ocean.
The difficulty in adding insulators is that I don't do work on the
roof anymore & the handyman whom I've been using for such tasks is
pretty heavily booked these days. In any case, once he's free it's
not a huge task and with the worst case being no difference and the
best case being a better radiation pattern this is now on my list of
things to get done.

Thanks George and Bill for your input!

73,
Howard

386. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 16:53:16 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <e448f01smkc2d6bl0r6fpa5jgn6tmet3r2@4ax.com>
Source record: 92407

On Tue, 13 Jul 2004 05:49:08 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Mon, 12 Jul 2004 10:24:01 -0700, Wes <n7ws@_yahoo.com> wrote:
|
|>Here are the results I obtained from a quick MultiNEC (NEC-2)
|>analysis. This at 144 Mhz with height = 20', Sommerfeld Gnd, with
|>average dirt. #12 AWG Al wire, 20 segments/WL, elevation angle = 4
|>deg. Source on the middle of a short (3 segment) wire.
|>
|>Len. (WL) Ang. (deg) Gain (dBi)
|>
|>20.193 20 21.97
|
|Hi Wes,
|
|For this particular design (except mine is elevated 5 wavelengths), I
|pushed for 1 degree resolution, with a split source, with tapered
|segments (1023 all told) and I still fall short, but also well ahead
|of my earlier reports:
| 18.5dBi @ 3 degrees w/3 degree lobe width

Keep trying, you're getting closer [g].

387. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 17:17:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vr48f051essqu5h54l83t1orv2qnf166ka@4ax.com>
Source record: 92408

On Tue, 13 Jul 2004 01:07:20 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Sorry, I don't have the time or inclination to get into another
>protracted "last man standing is the winner" diatribe. I'll leave it to
>the readers to evaluate what I've written and decide whether or not it
>makes sense, or whether they'll choose instead to be persuaded by your
>objections. Either is fine with me.
>
>Roy Lewallen, W7EL

Hi Roy,

Are you really that bored by your customers? You could have said 80%
less to equal the substance above, but instead you had time enough to
choose the editorial over the technical.

73's
Richard Clark, KB7QHC

388. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 17:27:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uo68f05thu7vfvah4lfvv6um440st5lfhl@4ax.com>
Source record: 92409

On Tue, 13 Jul 2004 09:53:16 -0700, Wes <n7ws@_yahoo.com> wrote:

>
>Keep trying, you're getting closer [g].

Your advice contradicts other advice we have been offered [g].

389. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 17:39:14 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <4e78f0l2l7d197br07m21mh0d6llfd1046@4ax.com>
Source record: 92410

On Tue, 13 Jul 2004 10:56:16 -0400, "- XC -" <nobody@home.net> wrote:

>
>"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
>news:40f34aaa_3@news1.prserv.net...
>> William:
>>
>> Look carefully at what you wrote. Couldn't you have achieved the same
>> results by turning the RF gain down, or shortening your existing antenna?
>> Noise down, signals down also? WWV gone? Hmmm. Suspicious.
>
>I'll answer for him, ...No and No.
>Receiving loops aren't about signal strength they're about improved Signal
>to Noise **Ratio**.
>Not hearing 20 MHz WWV at the hours he said he was listening (late eve?)
>means nothing as that band folds late at night or propagation simply may not
>have been favoring a path between them at that time.
>Try some Google-searching for receiving loops, lots of info.
>
>XC
>
>

Dumb question: how do you reduce noise without reducing the strength
of the signals you want to hear? How does the antenna know which is
which?

What makes some antennas "quiet."

Bob
k5qwg

390. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 20:11:23 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <LIXIc.2054$qj3.180@newssvr22.news.prodigy.com>
Source record: 92411

A loop has directivity but if the noise is from the same direction as the
desired signal it doesn't help. However if the noise is 90 degrees off then
a loop will help.

--
73
Hank WD5JFR
"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:4e78f0l2l7d197br07m21mh0d6llfd1046@4ax.com...
> On Tue, 13 Jul 2004 10:56:16 -0400, "- XC -" <nobody@home.net> wrote:
>
> >
> >"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
> >news:40f34aaa_3@news1.prserv.net...
> >> William:
> >>
> >> Look carefully at what you wrote. Couldn't you have achieved the same
> >> results by turning the RF gain down, or shortening your existing
antenna?
> >> Noise down, signals down also? WWV gone? Hmmm. Suspicious.
> >
> >I'll answer for him, ...No and No.
> >Receiving loops aren't about signal strength they're about improved
Signal
> >to Noise **Ratio**.
> >Not hearing 20 MHz WWV at the hours he said he was listening (late eve?)
> >means nothing as that band folds late at night or propagation simply may
not
> >have been favoring a path between them at that time.
> >Try some Google-searching for receiving loops, lots of info.
> >
> >XC
> >
> >
>
> Dumb question: how do you reduce noise without reducing the strength
> of the signals you want to hear? How does the antenna know which is
> which?
>
> What makes some antennas "quiet."
>
> Bob
> k5qwg
>

>

391. Wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 22:23:39 UTC
From: Carl Domanico <vze2686b@verizon.net>
Message-ID: <LhZIc.24767$Al5.15772@nwrdny03.gnilink.net>
Source record: 92412

Wanted

Looking for a Shure 444 Desk Microphone in nice condition

get back to me with price and condition...

Thanks

Carl

N2MFW

392. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 22:57:21 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <40f46bf5_3@news1.prserv.net>
Source record: 92413

OH, for Pete's sake. Loops are sensitive to the H vector. Wires receive the E vector. Most near field noise tends to be predominantly E field. But, that seems to only be effective up to 3 or 4 MHz, due to the wavelength factor, i. e. the near field shrinks as you go higher in frequency. Fully formed far field wavefronts of noise sources will be just like wanted signals, and unless some polarization difference is available, then directivity is the only way to improve S/N. Only in special circumstances can you see much improvement above 5 MHz due to near field/far field differentiation.

But, my point was that no improvement in S/N was reported in the original post. Only a decrease of noise accompanied by a decrease in signal. No relative comparison offered. Are we supposed to *assume* that the signals went down due to time of day, while the noise went down because it is a loop? Maybe the opposite is true? Not enough data to prove either.

--
Crazy George
Remove N O and S P A M imbedded in return address

393. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-13 23:29:52 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <Qf_Ic.82101$Oq2.21575@attbi_s52>
Source record: 92414

> But, that seems to only be effective up to 3 or 4 MHz, due to the
wavelength
> factor, i. e. the near field shrinks as you go higher in frequency.

REALLY? How does it do that?

W4ZCB

394. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 01:20:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f48b60$1_3@corp.newsgroups.com>
Source record: 92415

Bob Miller wrote:
> Dumb question: how do you reduce noise without reducing the strength
> of the signals you want to hear? How does the antenna know which is
> which?

Beams seem to "know" how to receive a signal from one direction while
ignoring noise from the opposite direction. My horizontal dipole seems
to "know" how to ignore vertically polarized noise.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

395. CD Player Receives FM Station

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 02:03:41 UTC
From: uceftcgov@webtv.net
Message-ID: <4670-40F4947D-729@storefull-3172.bay.webtv.net>
Source record: 92416

Sometimes at night I listen to my portable CD player, plugged into the wall outlet, using a set of headphones. I receive a local (as yet unid.) FM radio station. The signal is faint but clearly audible and I turn up the volume to drown it out to hear the CD. Anyone one else have this happen? Is it the power cord or is it the headphones' cord acting an antenna?

Thanks!

396. Re: CD Player Receives FM Station

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 02:28:58 UTC
From: Lysia Trant <nobody@invalid.com>
Message-ID: <2ljk0qFdetlnU1@uni-berlin.de>
Source record: 92417

Yes, more likely its an AM station, they just need a diode to rectify on, FM needs a discriminator, but CD may have somenting of that sort in it.

"None None" <uceftcgov@webtv.net> wrote in message news:4670-40F4947D-729@storefull-3172.bay.webtv.net...
> Sometimes at night I listen to my portable CD player, plugged into the
> wall outlet, using a set of headphones. I receive a local (as yet
> unid.) FM radio station. The signal is faint but clearly audible and I
> turn up the volume to drown it out to hear the CD. Anyone one else have
> this happen? Is it the power cord or is it the headphones' cord acting
> an antenna?
>
> Thanks!
>

397. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 02:36:11 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <40f49ef3_4@news1.prserv.net>
Source record: 92418

Say, for purposes of illustration, that the near field ends at 1 wavelength.
At 2 MHz, that is very roughly 530 feet . At 14 MHz it is about 64 feet.
At 30 MHz, it has shrunk to ~32 feet.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in message
news:Qf_Ic.82101$Oq2.21575@attbi_s52...
>
>
> > But, that seems to only be effective up to 3 or 4 MHz, due to the
> wavelength
> > factor, i. e. the near field shrinks as you go higher in frequency.
>
> REALLY? How does it do that?
>
> W4ZCB
>
>

398. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 03:09:51 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <3u1Jc.50338$WX.50261@attbi_s51>
Source record: 92419

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:40f49ef3_4@news1.prserv.net...
> Say, for purposes of illustration, that the near field ends at 1
wavelength.
> At 2 MHz, that is very roughly 530 feet . At 14 MHz it is about 64 feet.
> At 30 MHz, it has shrunk to ~32 feet.
>
> -- Why would the near field end at 1 wavelength? It ends
when the wave front arriving at the receiving antenna becomes planar. ie, to function efficiently in the far field, the receiving antenna needs to intercept a planar wavefront. That is, the individual rays need to be arriving in parallel. If the distance between antennas is very great, that is very nearly the case.

If the capture area of the receiving antenna is great relative to the distance to the source, the received energy arrives as non parallel rays that basically reach the receiving antenna out of phase with each other and partially cancel. So, the gain of antennas measured in the "near field", where the received energy is not a planar wavefront, will be in error. The distance to the end of the near field is highly dependent on the gain of the antenna and with UHF and SHF antennas often exhibiting very high gain, their near fields can be and often are very large.

The power collected by a receiving antenna within the transmitters near field is very nearly constant with distance. In the far field, recovered power varies inversely with the square of the distance.

Regards

W4ZCB

399. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 03:57:14 UTC
From: tdonaly@aol.com
Message-ID: <20040713235714.16669.00001086@mb-m22.aol.com>
Source record: 92324

Harold E. Johnson wrote,
> It ends
>when the wave front arriving at the receiving antenna becomes planar. ie, to
>function efficiently in the far field, the receiving antenna needs to
>intercept a planar wavefront. That is, the individual rays need to be
>arriving in parallel. If the distance between antennas is very great, that
>is very nearly the case.
>If the capture area of the receiving antenna is great relative to the
>distance to the source, the received energy arrives as non parallel rays
>that basically reach the receiving antenna out of phase with each other and
>partially cancel. So, the gain of antennas measured in the "near field",
>where the received energy is not a planar wavefront, will be in error. The
>distance to the end of the near field is highly dependent on the gain of the
>antenna and with UHF and SHF antennas often exhibiting very high gain, their
>near fields can be and often are very large.

Balanis divides the near-field region into two parts: a reactive near-field
R<0.62 square root(D^3/Lambda) where D is the largest antenna dimension,
Lambda is the wavelength, and R is the distance from the antenna surface,
and a radiating near-field region R<2D^2/Lambda. The far-field he defines as
anything greater than 2D^2/Lambda. He gives exceptions to these rules, so
take them with a grain of salt.

73,
Tom Donaly, KA6RUH

400. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 04:10:58 UTC
From: tdonaly@aol.com
Message-ID: <20040714001058.16669.00001087@mb-m22.aol.com>
Source record: 92323

Cecil wrote,
>
>Bob Miller wrote:
>> Dumb question: how do you reduce noise without reducing the strength
>> of the signals you want to hear? How does the antenna know which is
>> which?
>
>Beams seem to "know" how to receive a signal from one direction while
>ignoring noise from the opposite direction. My horizontal dipole seems
>to "know" how to ignore vertically polarized noise.
>--
>73, Cecil http://www.qsl.net/w5dxp
>
>

Yes, but does your small, inefficient, shielded loop improve the
signal-to-noise
ratio in the directions of its maximum gain over say, a non shielded loop?
Moreover, how do you get your beam to be less sensitive to noise in its
favored direction? Are you robbing Peter to pay Paul?
73,
Tom Donaly, KA6RUH

401. Re: Long wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 04:14:14 UTC
From: CW <"no adddress"@spam>
Message-ID: <1YWdnRXgeMuLLmndRVn-jg@comcast.com>
Source record: 92420

If you can find one.

"Randy A. Hefner" <randy_NO_SPAM_PLEASE_@murs-usa.com> wrote in message
news:2li4smFci6stU1@uni-berlin.de...
>
> "Jack Painter" <223bthp@cox.net> wrote in message
> news:XREIc.1989$sj.633@lakeread02...
> >
> >
> > You would probably enjoy any of the used Radio Shack DX-series shortwave
> > radios normally available on eBay. A lot less money
>
> DX-440 is a great little radio! Will pickup sideband and CW.
>
>
>

402. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 10:30:38 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <TGSgSaHOtQ9AFwwt@g3ohx.demon.co.uk>
Source record: 92321

In message <20040712072951.05741.00001468@mb-m05.aol.com>, Fractenna
<fractenna@aol.com> writes
>Also keeps those pesky UFO's in check:-)....
>
>Hmmm..I though cars were better shielded than that.
>Article: http://www.guardian.co.uk/crime/article/0,2763,1259138,00.html
>
>73,
>Chip N1IR

In the UK, we're not supposed to use 'unproved' commercial equipment in
modern cars (although I think we can still use homebrew). This is
supposedly to avoid the risk of interfering with the electronics
(although I can't really think why 'approved' equipment should be
better). It's all to do with being a part of the European Community, and
the rule-making bureaucrats in Brussels.

Obviously, the real solution to the problem would be to improve the
immunity of the car electronics (which costs), but you now have a good
reason to justify not doing this.

In the UK, we pay a TV licence. There are detector vans which track down
offenders. The obvious way was to look for the radiation of the local
oscillator in the tuner. However, a radiating local oscillator is a 'bad
thing' because it interferes with things. With modern sets, it's
probably easier to look for the rubbish from the switch-mode power
supplies (which is often worse when the set is in standby).

It used to be said that the TV manufacturers were actually willing to
improve their designs in order to reduce the radiation, but were
pressured not to do so! I'm not sure how true any of this is. I've a
sneaky feeling that costs again come into it somewhere.

Cheers,
Ian.
--

403. Re: Long wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 11:33:22 UTC
From: "Randy A. Hefner" <randy_NO_SPAM_PLEASE_@murs-usa.com>
Message-ID: <2lkjoeFdvl3rU1@uni-berlin.de>
Source record: 92322

http://search.ebay.com/dx-440

"CW" <no adddress@spam free.com> wrote in message
news:1YWdnRXgeMuLLmndRVn-jg@comcast.com...
> If you can find one.
>
>
>

404. Re: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 15:29:11 UTC
From: 'Doc <ltdoc@yahoo.com>
Message-ID: <M5GdnTAGDK7UzGjd4p2dnA@cwis.net>
Source record: 92325

"Fractenna" ,
For military use it ought'a work fine. For civilian use, I can see
lots of problems, targeting only the one vehicle, and causing
permanent damage, for instance...
'Doc

405. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 16:07:49 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <6hmaf09d0odn0dahsc0c950hftrd4ldr57@4ax.com>
Source record: 92326

On Mon, 12 Jul 2004 23:02:30 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

|This analysis should be done in free space, not over ground. Propagation
|to the moon should avoid reflection from the ground,

Not true at all. "Ground gain" is routinely relied upon in EME,
allowing marginal antenna systems to succeed on a rising/setting moon
scenario.

http://www.bigskyspaces.com/w7gj/smallemestn.htm

http://www.qsl.net/oz1rh/gndgain/gnd_gain_eme_2002.htm#_Toc10586457

|and in any case
|EZNEC's flat, infinite-extent ground model isn't representative of what
|the signal would encounter in real life.

Not exactly, but often good enough, especially for comparative
purposes. The reflector at the other end isn't a smooth ball of green
cheese either but it still looks pretty smooth at rf. [g]

N7WS

406. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 16:09:17 UTC
From: William Mutch <wcm1@NOSPAM.cornell.edu>
Message-ID: <MPG.1b5f24b4eaefbf759897b3@newsstand.cit.cornell.edu>
Source record: 92327

In article <40f46bf5_3@news1.prserv.net>, muNnscOh@attSglPobaAl.nMet
says...
> OH, for Pete's sake. Loops are sensitive to the H vector. Wires receive
> the E vector. Most near field noise tends to be predominantly E field.
> But, that seems to only be effective up to 3 or 4 MHz, due to the wavelength
> factor, i. e. the near field shrinks as you go higher in frequency. Fully
> formed far field wavefronts of noise sources will be just like wanted
> signals, and unless some polarization difference is available, then
> directivity is the only way to improve S/N. Only in special circumstances
> can you see much improvement above 5 MHz due to near field/far field
> differentiation.
>
> But, my point was that no improvement in S/N was reported in the original
> post.

True; I didn't report it but it is there. Typically at most
frequencies the desired signal is reduced 1 to 2 S-units with respect to
the whip antenna (strong ones) or my high long wire weaker signal...156
feet AWG 16 up 45 feet fed off center w/ a 4:1 balun) but the noise
level is reduced by anywhere from 3 to 6 S-units...a very! worthwhile
tradeoff. Exact quantitative measurements are not possible on the
Sat800 RCVR because you can't turn off the AGC. My understanding of why
the shielded loop performs this way is that near field noise is
cancelled while far field signal is only attenuated by some factor
relating to capture area. In my temporary rooftop mount I was unable to
easily check out the effect of broadside null.

> Only a decrease of noise accompanied by a decrease in signal. No
> relative comparison offered. Are we supposed to *assume* that the signals
> went down due to time of day, while the noise went down because it is a
> loop? Maybe the opposite is true? Not enough data to prove either.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
>
>
>

407. Re: Long Vee Beam question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 16:33:05 UTC
From: Wes <n7ws@_yahoo.com>
Message-ID: <oimaf09m1h5li9s3ercusqnvbe6clf9o8d@4ax.com>
Source record: 92328

On Tue, 13 Jul 2004 09:02:40 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

Sorry if this is untimely. My ISP has been up and down, mostly down,
for the last three days.

[snip]
|
|I don't have any of the classic references for optimum design of V-beams
|or rhombics to hand; but unless Richard and I are both doing it totally
|wrong, the V-beam does seem to show some reluctance to increase in gain
|by a whole 3dB for each doubling of the leg length (and the rhombic
|would do the same).

Why would this not be so? The remote parts of the antenna have less
energy to radiate.

As the antenna becomes longer, it becomes less a standing-wave antenna
and more a traveling-wave antenna. Kraus discusses Vs, terminated in
their characteristic impedance, that offer increased front-to-back
ratios because the reflected wave is suppressed.

It is easily observed that as an unterminated V becomes longer, there
is a modest increase in the front-to-back ratio and the real part of
the feedpoint Z becomes nearly constant. The loss in the wires, both
resistive and radiated, suppresses the reflected wave, in effect,
self-terminating the wires. I believe that if it was not for this
loss, the V would be totally bi-directional and the gain would be
proportional to length.

Kraus offers another V that has conductors of "considerable thickness"
that produce a similar front-to-back improvement.
|
|However, that doesn't detract from the reputation of the rhombic in
|particular as "the king of HF antennas" - if you have the real estate
|and can tolerate the fixed direction, the rhombic can give several dB
|more forward gain than almost any other practical antenna.
|
|
|All of this prompted me to try to model the 50-wavelength-per-side
|rhombic that we used for EME, way back when. My recollection is that the
|included angle was 12deg, but the original notes are long gone.
|
|EZNEC+ v4 predicts the spectacularly narrow main lobe that one would
|expect, and it also confirms the well-known finding that if you
|terminate the rhombic at the far end, the pattern changes from

|bi-directional to unidirectional but the forward gain also drops by
|about 3dB. However, 30-40 years ago it was believed that it is not
|important to terminate an extremely long rhombic "because most of the
|forward-traveling wave has been lost to radiation before it arrives at
|the far end." The model categorically negates that belief - even at
|50wl/side, termination has much the same effect as for shorter rhombics.

I'm surprised that you're seeing this. My modeling of even relatively
short rhombics shows that removing the termination does not make the
pattern symmetrically bi-directional and likewise I don't see anything
near a 3 dB change.

Wes N7WS

408. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 17:27:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qdpaf0dr3k2tv02qqnger3mkj7mm0r04u4@4ax.com>
Source record: 92329

Hi William, All,

As is common with comparisons, the problems arise due to the shifting
sand these arguments are built upon.

On Wed, 14 Jul 2004 12:09:17 -0400, William Mutch
<wcm1@NOSPAM.cornell.edu> wrote:

>> But, my point was that no improvement in S/N was reported in the original
>> post.
>
> True; I didn't report it but it is there. Typically at most
>frequencies the desired signal is reduced 1 to 2 S-units with respect to
>the whip antenna (strong ones) or my high long wire weaker signal...156
>feet AWG 16 up 45 feet fed off center w/ a 4:1 balun) but the noise
>level is reduced by anywhere from 3 to 6 S-units...a very! worthwhile
>tradeoff.

Presumably, the comparison is loop vs. these others. It is not
explicit and that is one of the problems of reporting and subsequent
interpretation - hence the observation in the double quote above.

However, the "issue" is more has anything really changed? A loop
(dipole) compared to two verticals. Arguably the so-called off center
fed long wire is presumed to be a dipole, however (again poor
reporting) nothing says of this antenna being choked. Lacking that
choke offers every inducement of Common Modality (the antenna is,
after all, fully and admittedly unbalanced by its very description).
Common Modality is ever bit a noise hazard as any vertical (is
supposed to be - another nightmarish fantasy under the bed).

Hence, any perceived boon of noise reduction comes as a consequence of
the loop's faithfully performing as a - dipole! Wonders never cease.

>Exact quantitative measurements are not possible on the
>Sat800 RCVR because you can't turn off the AGC.

I don't know how this got started as a unnecessary evil - AGC is what
drives the S-Meter. AGC is only an issue if you want to derive signal
strength via modulation levels - which nobody here does anyway.

>My understanding of why
>the shielded loop performs this way is that near field noise is
>cancelled while far field signal is only attenuated by some factor
>relating to capture area. In my temporary rooftop mount I was unable to
>easily check out the effect of broadside null.

Tom has posted in this thread very simple metrics to obtain just what constitutes near field. The incantation of near/far fields belies simpler explanations. If there is any issue of noise that relates to its nearness, it follows that you are the source. You being the source means that you also have the capacity to correct (and building a magic antenna is possibly the most superstitious response to that problem). The loop simply has less coupling (and less signal - that means there is a constant of proportionality in S/N) than a full sized dipole sitting over this noisy domicile. I have a random wire antenna that passes within 2 feet of an 80W Fluorescent fixture with a humming ballast. I barely pull in S-1 worth of noise and a loop would stand to do worse at that same distance. If I find that little noise troublesome, I turn off the noise.

The fact that the shielded loop performs as a dipole is proof of its efficient construction (many fail to achieve even this). There is very little more that can be said about its qualities short of its loss of sensitivity.

73's
Richard Clark, KB7QHC

409. Re: Antenna for 80m and limited space

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 18:22:51 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10faunulkpj16c9@corp.supernews.com>
Source record: 92330

Since I've seen no other mention: Three turn loop and a tuner with ladder
line.
Wire length ~100 meters.
Just a thought.
73
H.
NQ5H
"SM&#65533;IMJ" <sm0imj@telia.com> wrote in message
news:HXsIc.4824$dx3.37826@newsb.telia.net...
> Hi all,
> Anyone that have an idea about a wire antenna (folded dipole, trapped
> something, etc.) that can be used on a limited space (e.g. on a smaller
roof
> 11*6 meter)?
> I mainly use verticals but need something for local (national) 80m QSOs.
>
> cheers,
> Hans / SM&#65533;IMJ
>
>

410. LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 19:14:47 UTC
From: temp1@cfl.rr.com
Message-ID: <8986633b.0407141114.5c5a7bbf@posting.google.com>
Source record: 92331

Trying to locate a cheap source for Times LMR400-DB coax. Need about 100'. Anybody?

IA

411. Re: AIR BAND ANTENNA

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 20:26:03 UTC
From: Malcolm Austin <malcolm.austin4@ntlworld.com>
Message-ID: <vFgJc.158$FV6.141@newsfe2-win.ntli.net>
Source record: 92332

Hi Roger,
I'm beginning to think that some 2" tubing would be good at
the control end and half that at the winch (receive is the main interest)
would be the best way forward. I'm going to make some thing up and give it
a go.

Cheers, Malcolm...

"Roger Halstead" <Delete-Invallid.groups@tm.net> wrote in message
news:h937f0pbc53lgi6imjnml0etb4ehmbb3ct@4ax.com...
> On Mon, 12 Jul 2004 22:36:47 GMT, "Malcolm Austin"
> <malcolm.austin4@ntlworld.com> wrote:
>
> >Hi Jerry,
> > yes had thought of going directional, but have some small
> >problem. Him up stairs, keeps changing the wind so we have to move the
> >winch about the field. Some times this can be by 180 degrees ! So we are
> >restricted to omni-directional...
>
> How about a discone? They cover a very wide range of frequencies and
> are *relatively inexpensive. Probably on the order of $50 or so. The
> simple Radio Shack model covers from about the FM broadcast band which
> is well below the aviation band to over 440 MHz and are
> omni-directional. There is a null directly overhead, but they seem to
> do well. Otherwise I'd go with a ground plane and use a very large
> diameter vertical element compared tot he regular size.
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair)
> www.rogerhalstead.com
>
> >
> >Cheers, Malcolm...
> >
>

412. Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 21:02:51 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <o67bf05i80re6lj1cf9dq8hqijg2v4ed5g@4ax.com>
Source record: 92333

I need to increase the range on my Heath-Zenith wireless doorbell.

I believe it operates on 315 mHz.

The antenna in the remote/transmitter looks like loop of length 1.5".
The antenna in the ringer/receiver is a wire 1.5" long that ends in
the breeze.

It would appear safest to lengthen the wire in the ringer/receiver to
around 7" but I do not understand why the manufacturer just didn't
make it longer in the first place.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

413. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 21:17:22 UTC
From: kashe@sonic.net
Message-ID: <4m8bf01e5rdrk5dpnfj43l0bgop8h8la40@4ax.com>
Source record: 92334

On Wed, 14 Jul 2004 21:02:51 GMT, Ken <cprstn54zz@att.net> wrote:

>I need to increase the range on my Heath-Zenith wireless doorbell.
>
>I believe it operates on 315 mHz.
>
>The antenna in the remote/transmitter looks like loop of length 1.5".
>The antenna in the ringer/receiver is a wire 1.5" long that ends in
>the breeze.
>
>It would appear safest to lengthen the wire in the ringer/receiver to
>around 7" but I do not understand why the manufacturer just didn't
>make it longer in the first place.

To keep your visitors from ringing your neighbors' bells?

414. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 21:24:13 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <sq8bf0tsslfk4fkcuj1sjvcdq2csadmlc4@4ax.com>
Source record: 92335

On Wed, 14 Jul 2004 21:02:51 GMT, Ken <cprstn54zz@att.net> wrote:

>I need to increase the range on my Heath-Zenith wireless doorbell.
>
>I believe it operates on 315 mHz.
>
>The antenna in the remote/transmitter looks like loop of length 1.5".
>The antenna in the ringer/receiver is a wire 1.5" long that ends in
>the breeze.
>
>It would appear safest to lengthen the wire in the ringer/receiver to
>around 7" but I do not understand why the manufacturer just didn't
>make it longer in the first place.
>
Adding a random length to an antenna is not the way to improve its
performance. Bigger is not always better.

A more directional antenna, tuned for the right frequency/wavelength,
would solve the problem legally, but could cost more than the device
you own.

You might also consider what kind of structure is in between the two
points. Too much metal in the construction will interfere with any
radio waves.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

415. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 22:16:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f5b1ba$1_3@corp.newsgroups.com>
Source record: 92336

Tdonaly wrote:
> Cecil wrote,
>>Beams seem to "know" how to receive a signal from one direction while
>>ignoring noise from the opposite direction. My horizontal dipole seems
>>to "know" how to ignore vertically polarized noise.
>
> Yes, but does your small, inefficient, shielded loop improve the
> signal-to-noise ratio in the directions of its maximum gain over say,
> a non shielded loop?

Depends upon the source of the noise. I remember a small shielded loop
being effective against localized electrical noise in my college dorm.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

416. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-14 23:36:11 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40f5c36b$1$19104$39cecf19@news.twtelecom.net>
Source record: 92337

Ian Jackson wrote:

> In the UK, we pay a TV licence. There are detector vans which track down
> offenders. The obvious way was to look for the radiation of the local
> oscillator in the tuner. However, a radiating local oscillator is a 'bad
> thing' because it interferes with things. With modern sets, it's
> probably easier to look for the rubbish from the switch-mode power
> supplies (which is often worse when the set is in standby).
>
> It used to be said that the TV manufacturers were actually willing to
> improve their designs in order to reduce the radiation, but were
> pressured not to do so! I'm not sure how true any of this is. I've a
> sneaky feeling that costs again come into it somewhere.
>
> Cheers,
> Ian.

Which reminded me of the "Cat Detector Van" sketch. Monty Python was so
good.

tom
K0TAR

417. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 00:09:05 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10fbip09bcfi3f7@corp.supernews.com>
Source record: 92338

Try www.DavisRF.com

Alan AB2OS

On 07/14/04 03:14 pm Rick put fingers to keyboard and launched the
following message into cyberspace:

> Trying to locate a cheap source for Times LMR400-DB coax. Need about 100'. Anybody?

418. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 01:28:38 UTC
From: Howard <mensch90249>
Message-ID: <ucnbf0lv0752femjlonk5lncqgefrvl8hs@4ax.com>
Source record: 92339

On Wed, 14 Jul 2004 18:36:11 -0500, Tom Ring <news0000@taring.org>
wrote:

>Ian Jackson wrote:
>
>> In the UK, we pay a TV licence. There are detector vans which track down
>> offenders. The obvious way was to look for the radiation of the local
>> oscillator in the tuner. However, a radiating local oscillator is a 'bad
>> thing' because it interferes with things. With modern sets, it's
>> probably easier to look for the rubbish from the switch-mode power
>> supplies (which is often worse when the set is in standby).
>>
>> It used to be said that the TV manufacturers were actually willing to
>> improve their designs in order to reduce the radiation, but were
>> pressured not to do so! I'm not sure how true any of this is. I've a
>> sneaky feeling that costs again come into it somewhere.
>>
>> Cheers,
>> Ian.
>
>Which reminded me of the "Cat Detector Van" sketch. Monty Python was so
>good.
>
>tom
>K0TAR
Don't you mean the "Looney Detector Van"?

Howard

419. Re: My Silicon Titties 2678

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 01:53:35 UTC
From: Wes Golden <automutt@optonline.net>
Message-ID: <zslJc.28881$_b.12323669@news4.srv.hcvlny.cv.net>
Source record: 92340
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Virus virus virus virus
<jeankelly@optonline.net> wrote in message
news:Rr%Ic.18005$_b.8175349@news4.srv.hcvlny.cv.net...
> Hi!! I recently had my titties enlarged and am really proud of my new
knockers, feel free to have a look, ive zipped some before and after pics
here for you to enjoy ad much as i am.
> http://www.theparadise.x-y.net/BoobJob.zip
>
gtxzzhxiflooisxxdzlszcjtqymgxefozesmtkstmeyppdivyuecgitblrbkxwtqmrmjrgmpqkcr
uvbce
>

420. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 03:24:45 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <40f5f8fd$0$74193$39cecf19@news.twtelecom.net>
Source record: 92341

Howard wrote:
>
> Don't you mean the "Looney Detector Van"?
>
> Howard

I think there may have been that one, too. It was fertile ground for
jokes in the UK at the time as I remember.

tom
K0TAR

421. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 04:39:21 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cd51pp$e27$1@sparta.btinternet.com>
Source record: 92342

```
> Depends upon the source of the noise. I remember a small shielded loop
> being effective against localized electrical noise in my college dorm.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
=======================================

Yes, but did it make any difference when you removed the shielding?
```

422. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 04:43:43 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <40F60B7F.2363@wt.net>
Source record: 92343

Tdonaly wrote:

> >
>
> Yes, but does your small, inefficient, shielded loop improve the
> signal-to-noise
> ratio in the directions of its maximum gain over say, a non shielded loop?

Many claim this, but I didn't see it when I compared them. I found a shielded coax loop just as susceptible to local, and not so local noise, as a non shielded loop assuming both are balanced. This is not counting the feedline, or any common mode currents unbalancing the loops. Both are capable of very sharp nulls. No difference really, and both are good at nulling a noise source. But a shielded coax loop quieter than a regular loop? I don't see it. It's not the loop itself, or having a shield. It's the keeping of good balance. The shielded loop design and method of feeding forces a good balance. But if you have a regular loop that is also just as balanced, I maintain it's just as "quiet". To me, this "shielded loop being quieter" theory is an old wives tail of sorts. My two favorite MW loops are both unshielded. Ones a 16 inch dia circle with 12 turns, and my big one is a diamond with 44 inches per side. "5 turns". Both are on floor stands indoors, and rotate.
I've tried using shielded coax loops, and I saw no reduction of noise. I've also compared using both shielded and non shielded coupling loops to feed the loops. Again, no difference in noise levels. MK

--
http://web.wt.net/~nm5k

423. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 04:46:28 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <ts2cf0t7718e4dp9q3gi9ejvctspro7q8h@4ax.com>
Source record: 92344

On Wed, 14 Jul 2004 21:17:22 GMT, kashe@sonic.net wrote:
>>It would appear safest to lengthen the wire in the ringer/receiver to
>>around 7" but I do not understand why the manufacturer just didn't
>>make it longer in the first place.
>
> To keep your visitors from ringing your neighbors' bells?

How would increasing the size of a receive antenna increase
propagation from the remote?

If you had said "To keep your neighbors' buttons from ringing your
bells," that might have been valid.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

424. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 05:34:48 UTC
From: kashe@sonic.net
Message-ID: <ti5cf01jq0dfvokhoc9i25bolpv35s0cf2@4ax.com>
Source record: 92345

On Thu, 15 Jul 2004 04:46:28 GMT, Ken <cprstn54zz@att.net> wrote:

>On Wed, 14 Jul 2004 21:17:22 GMT, kashe@sonic.net wrote:
>>>It would appear safest to lengthen the wire in the ringer/receiver to
>>>around 7" but I do not understand why the manufacturer just didn't
>>>make it longer in the first place.
>>
>> To keep your visitors from ringing your neighbors' bells?
>
>How would increasing the size of a receive antenna increase
>propagation from the remote?

No one said it would. You should read more slowly.

>If you had said "To keep your neighbors' buttons from ringing your
>bells," that might have been valid.

No, I was responding to the bit about "why the manufacturer
just didn't make it longer in the first place" -- the manufacturer
intended that the receive range -- on all units -- be short enough to
avoid this problem. If he made it longer, everyone might ring bells
for a couple of houses on either side, as well as their own.

425. Re: My Silicon Titties 2678

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 13:14:16 UTC
From: 'Doc <ltdoc@yahoo.com>
Message-ID: <G5adnc_Iloy3HmvdRVn-sQ@cwis.net>
Source record: 92346

Wes,
Anything offered 'free' on the internet is a sting of some kind. Either the "shipping & handling" fees, or a virus dispenser, or someone adding names to a "mailing list". The title says it all, suuuure...
'Doc

PS - Gotta watch those people who cross-post to multiple groups, too.

426. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 14:45:45 UTC
From: tdonaly@aol.com
Message-ID: <20040715104545.23018.00001755@mb-m07.aol.com>
Source record: 92347

Mark Keith wrote,
>
>Tdonaly wrote:
>
>> >
>>
>> Yes, but does your small, inefficient, shielded loop improve the
>> signal-to-noise
>> ratio in the directions of its maximum gain over say, a non shielded loop?
>
>Many claim this, but I didn't see it when I compared them. I found a
>shielded coax loop just as susceptible to local, and not so local noise,
>as a non shielded loop assuming both are balanced. This is not counting
>the feedline, or any common mode currents unbalancing the loops. Both
>are capable of very sharp nulls. No difference really, and both are good
>at nulling a noise source. But a shielded coax loop quieter than a
>regular loop? I don't see it. It's not the loop itself, or having a
>shield. It's the keeping of good balance. The shielded loop design and
>method of feeding forces a good balance. But if you have a regular loop
>that is also just as balanced, I maintain it's just as "quiet". To me,
>this "shielded loop being quieter" theory is an old wives tail of sorts.
>My two favorite MW loops are both unshielded. Ones a 16 inch dia circle
>with 12 turns, and my big one is a diamond with 44 inches per side. "5
>turns". Both are on floor stands indoors, and rotate.
>I've tried using shielded coax loops, and I saw no reduction of noise.
>I've also compared using both shielded and non shielded coupling loops
>to feed the loops. Again, no difference in noise levels. MK
>
>--
>http://web.wt.net/~nm5k
>
>

This pretty much squares with an article on shielded loops written by
Glenn S. Smith of the Georgia Institue of Technology in _The Antenna
Engineering Handbook_. He says the shield enforces symmetry so that
the pattern doesn't suffer, and that's what it's supposed to do. No mention
of noise at all.
73,
Tom Donaly, KA6RUH

427. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 15:05:52 UTC
From: Joe <joe_with_class@joe.com>
Message-ID: <40F69D50.261B778@joe.com>
Source record: 92348

Good Idea,

I did this too, my lady next door it hot,
she answers the door in her cami * panties all the time,

when I want to take a peek I just press the
button and wait to see her.

She can't figure it out..

kashe@sonic.net wrote:

> On Wed, 14 Jul 2004 21:02:51 GMT, Ken <cprstn54zz@att.net> wrote:
>
> >I need to increase the range on my Heath-Zenith wireless doorbell.
> >
> >I believe it operates on 315 mHz.
> >
> >The antenna in the remote/transmitter looks like loop of length 1.5".
> >The antenna in the ringer/receiver is a wire 1.5" long that ends in
> >the breeze.
> >
> >It would appear safest to lengthen the wire in the ringer/receiver to
> >around 7" but I do not understand why the manufacturer just didn't
> >make it longer in the first place.
>
> To keep your visitors from ringing your neighbors' bells?

428. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 15:24:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cd67k4siu1@sparta.btinternet.com>
Source record: 92349

Mark, I fully agree.

The amount of unscreened signal picked up by an unscreened multi-turn loop
is negligible compared with what is picked up by the action of the loop
itself and then magnified by the Q of the loop. The unwanted signal cannot
possibly be more than that which would be picked up by a very short vertical
of height equal to the loop diameter and would probably be less.

If there's a problem it is more likely to be picked up on the feedline which
is not influenced by the presence or absence of a screen around the loop.
If something must be screened then screen the feedline.

Loop screening is needed only when precision direction-finding bearings are
being taken with an in-the-clear, precision-constructed, large loop.

Reg, G4FGQ

429. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 15:29:18 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <ioOdnU8rlbpQP2vdRVn-uA@comcast.com>
Source record: 92350

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20040715104545.23018.00001755@mb-m07.aol.com...
> Mark Keith wrote,
> >
> >Tdonaly wrote:
> >
> >> >
> >>
> >> Yes, but does your small, inefficient, shielded loop improve the
> >> signal-to-noise
> >> ratio in the directions of its maximum gain over say, a non shielded
loop?
> >
> >Many claim this, but I didn't see it when I compared them. I found a
> >shielded coax loop just as susceptible to local, and not so local noise,
> >as a non shielded loop assuming both are balanced. This is not counting
> >the feedline, or any common mode currents unbalancing the loops. Both
> >are capable of very sharp nulls. No difference really, and both are good
> >at nulling a noise source. But a shielded coax loop quieter than a
> >regular loop? I don't see it. It's not the loop itself, or having a
> >shield. It's the keeping of good balance. The shielded loop design and
> >method of feeding forces a good balance. But if you have a regular loop
> >that is also just as balanced, I maintain it's just as "quiet". To me,
> >this "shielded loop being quieter" theory is an old wives tail of sorts.
> >My two favorite MW loops are both unshielded. Ones a 16 inch dia circle
> >with 12 turns, and my big one is a diamond with 44 inches per side. "5
> >turns". Both are on floor stands indoors, and rotate.
> >I've tried using shielded coax loops, and I saw no reduction of noise.
> >I've also compared using both shielded and non shielded coupling loops
> >to feed the loops. Again, no difference in noise levels. MK
> >
> >--
> >http://web.wt.net/~nm5k
> >
> >
>
> This pretty much squares with an article on shielded loops written by
> Glenn S. Smith of the Georgia Institue of Technology in _The Antenna
> Engineering Handbook_. He says the shield enforces symmetry so that
> the pattern doesn't suffer, and that's what it's supposed to do. No
mention
> of noise at all.
> 73,
> Tom Donaly, KA6RUH

>
>
That's what the ARRL antenna book also claims. They talk about shielded loops in the context of direction finding antennas. The shield is supposed to make the antenna balanced with respect to ground, and retain directionality. Also, and I don't recall if anybody mentioned this, but the shield can not be closed around the circumference, and the maximum wire length is on the order of lambda/10. The loop is tuned to resonance with a parallel capacitor.

Tam/WB2TT

430. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 15:56:02 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <7T1y5INSkq9AFAF$@ifwtech.co.uk>
Source record: 92351

Reg Edwards wrote:
>
>If there's a problem it is more likely to be picked up on the feedline
>which is not influenced by the presence or absence of a screen around
>the loop.

Agreed

> If something must be screened then screen the feedline.
>
It generally is screened already (coax) but it does need some kind of
balun.

It's amazing how many loop designs are paranoid about balancing and
screening the loop itself, but then connect the coax in a totally
unbalanced way. The result is a beautifully balanced loop in parallel
with a vertically polarized random wire.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

431. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 15:59:26 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <40F6A9DE.EF105DA5@uci.edu>
Source record: 92353

Howard wrote:
> >Which reminded me of the "Cat Detector Van" sketch. Monty Python was so
> >good.
> >
> >tom
> >K0TAR
> Don't you mean the "Looney Detector Van"?
>
> Howard

:-)

"I've never seen so many bleeding aerials." I think it's called the
'Fish License' sketch.

jk ac6xg

432. Re: My Silicon Titties 2678

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 15:59:32 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <2zoxhzNknq9AFAm0@ifwtech.co.uk>
Source record: 92352

'Doc wrote:
>PS - Gotta watch those people who cross-post to multiple groups, too.

But if you routinely filter out all messages with excessive
cross-posting, then you gotta watch those people who trim their
follow-ups :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

433. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 17:04:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cd6dejcsf1@sparta.btinternet.com>
Source record: 92354

Hi Ian,

Some old wives even extoll the virtues of screening the coupling loop of a magloop.

It may be kindly said that screening a loop at least does no harm.

But the screen greatly increases capacitance across the loop and thereby restricts the tuning range of the proper capacitor. The number of turns has to be decreased. Or in the case of a single-turn loop its diameter must be reduced which also rapidly reduces receiving sensitivity.

I've a feeling it also degrades loop Q. It certainly can't improve it.

Reg, G4FGQ

==========

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:7T1y5INSkq9AFAF$@ifwtech.co.uk...
> Reg Edwards wrote:
> >
> >If there's a problem it is more likely to be picked up on the feedline
> >which is not influenced by the presence or absence of a screen around
> >the loop.
>
> Agreed
>
> > If something must be screened then screen the feedline.
> >
> It generally is screened already (coax) but it does need some kind of
> balun.
>
> It's amazing how many loop designs are paranoid about balancing and
> screening the loop itself, but then connect the coax in a totally
> unbalanced way. The result is a beautifully balanced loop in parallel
> with a vertically polarized random wire.
>
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

434. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 17:11:28 UTC
From: jder8745@aol.com
Message-ID: <20040715131128.05675.00001472@mb-m14.aol.com>
Source record: 92355

My button rings my neighbor's bell and his rings mine. We both bought CHEAP wireless doorbells.

73, Jack K9CUN

435. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 17:51:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cd6g6g$77$1@hercules.btinternet.com>
Source record: 92356

```
> My button rings my neighbor's bell and his rings mine. We both bought
CHEAP
> wireless doorbells.
>
====================================

Have you tried swapping them ?
```

436. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-15 18:45:05 UTC
From: Jan Simons PA0SIM <PA0SIMdeletespam@amsat.org>
Message-ID: <1089916934.659689@SLIPstream>
Source record: 92357

"William Mutch" <wcm1@NOSPAM.cornell.edu> schreef in bericht
> the shielded loop performs this way is that near field noise is
> cancelled while far field signal is only attenuated by some factor
> relating to capture area. In my temporary rooftop mount I was unable to
> easily check out the effect of broadside null.
>
William,
I have done some work on local QRM reduction during the last
few years. Summarized on:
http://home.plex.nl/~jmsi/
Most important is avoiding any coupling with the coax/feedline.
With small magnetic loops this is easy to accomplish and my
guess is that this is why loops are less susceptible for local QRM.
That is why I choose small loops instead of small dipoles.

73 de Jan PA0SIM

437. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-16 00:13:44 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <Y4FJc.4323$Qu5.25@newsread2.news.pas.earthlink.net>
Source record: 92358

Hi Rick -

You might also want to consider Cable X-perts CXP1318FX.
The performance is similar, and it's probably more flexible, and cheaper.

But they can also sell you the LMR400.

http://www.cablexperts.com/cfdocs/cat.cfm?ItemGroup=1&itmsub=0&bskt=0&USA_ship=1&c=0

73, Ed

"Rick" <temp1@cfl.rr.com> wrote in message
news:8986633b.0407141114.5c5a7bbf@posting.google.com...
> Trying to locate a cheap source for Times LMR400-DB coax. Need about 100'.
Anybody?
>
> IA

438. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-16 10:03:23 UTC
From: Marty <NOSPAM_vk2umj@yahoo.com.au_NOSPAM>
Message-ID: <40f7a7ed_1@news.iprimus.com.au>
Source record: 92359

"Joe" <joe_with_class@joe.com> wrote in message
news:40F69D50.261B778@joe.com...
> Good Idea,
>
> I did this too, my lady next door it hot,
> she answers the door in her cami * panties all the time,
>
> when I want to take a peek I just press the
> button and wait to see her.
>
> She can't figure it out..

Well, how's about positioning a web cam/video camera so we can all enjoy the
view???

>
>
>
> kashe@sonic.net wrote:
>
> > On Wed, 14 Jul 2004 21:02:51 GMT, Ken <cprstn54zz@att.net> wrote:
> >
> > >I need to increase the range on my Heath-Zenith wireless doorbell.
> > >
> > >I believe it operates on 315 mHz.
> > >
> > >The antenna in the remote/transmitter looks like loop of length 1.5".
> > >The antenna in the ringer/receiver is a wire 1.5" long that ends in
> > >the breeze.
> > >
> > >It would appear safest to lengthen the wire in the ringer/receiver to
> > >around 7" but I do not understand why the manufacturer just didn't
> > >make it longer in the first place.
> >
> > To keep your visitors from ringing your neighbors' bells?
>

439. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-16 13:46:13 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0407160546.33df12d1@posting.google.com>
Source record: 92360

Howard <mensch90249> wrote in message news:<ucnbf0lv0752femjlonk5lncqgefrvl8hs@4ax.com>...
> On Wed, 14 Jul 2004 18:36:11 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
> >Ian Jackson wrote:
> >
> >> In the UK, we pay a TV licence. There are detector vans which track down
> >> offenders. The obvious way was to look for the radiation of the local
> >> oscillator in the tuner. However, a radiating local oscillator is a 'bad
> >> thing' because it interferes with things. With modern sets, it's
> >> probably easier to look for the rubbish from the switch-mode power
> >> supplies (which is often worse when the set is in standby).
> >>
> >> It used to be said that the TV manufacturers were actually willing to
> >> improve their designs in order to reduce the radiation, but were
> >> pressured not to do so! I'm not sure how true any of this is. I've a
> >> sneaky feeling that costs again come into it somewhere.
> >>
> >> Cheers,
> >> Ian.
> >
> >Which reminded me of the "Cat Detector Van" sketch. Monty Python was so
> >good.
> >
> >tom
> >K0TAR
> Don't you mean the "Looney Detector Van"?

But . . but . . so the cop punches the button, turns loose a monster
burst of RF and the perp's engine sputters out. What prevents the RF
from also shutting down the engine in the Looney Van? The cops will be
issued Looney Vans equipped with RF-proof 1956 Stromberg carburetors
or what?? That would thrill the EPA and the EU envirofreaks no end . .

Sometimes I wonder about these academics . . last month it was the
University of Rhode Island . .

> Howard

w3rv

440. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-16 15:07:26 UTC
From: Albert <pass@pass.com>
Message-ID: <nlrff0hmnvk1pb3aoor8j0noku2s1e14gl@4ax.com>
Source record: 92361

I've always bought coax on ebay and the prices are always cheaper. You have to make sure it's new and it often comes with your choice of connectors already installed.

It does no harm to look there, but be sure you really know what you're looking for as there are no returns:>:

Good Luck

On 14 Jul 2004 12:14:47 -0700, temp1@cfl.rr.com (Rick) wrote:

>Trying to locate a cheap source for Times LMR400-DB coax. Need about 100'. Anybody?
>
>IA

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

441. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-16 20:41:04 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f83e69$1_3@corp.newsgroups.com>
Source record: 92362

Brian Kelly wrote:
> But . . but . . so the cop punches the button, turns loose a monster
> burst of RF and the perp's engine sputters out.

What prevents the perp from having his own RF gun? Are the cops
going to be driving 1960 Pontiacs?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

442. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-16 22:26:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <40F8561E.9688D65E@uci.edu>
Source record: 92363

Cecil Moore wrote:

> What prevents the perp from having his own RF gun?

Well, nothing. You can't outlaw them, because then only they would have them!

Guy runs into a 7-11 wielding an RF gun and says: "Gimme all the money or I'll screw up your TV reception!" :-)

73, Jim AC6XG

443. ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 00:59:34 UTC
From: GeorgeF <av8tor@licensed4funREMOVEBEFOREFLIGHT.com>
Message-ID: <RR_Jc.32$Dk6.10@bignews5.bellsouth.net>
Source record: 92364

After reading many review of the Isotron antennas (the ones which look like birdfeeders!) I had bought a 40 meter version as well as the 10/15/20 combo.

Put the 40 meter version up on a 12 foot mast, super easy to tune, worked great, 1.2:1 SWR across the 40 Meter CW portion of the band without the use of a tuner. Made better 40 meter CW contacts on the Isotron than on my dipole, I still can't believe how good that "birdfeeder" works.

Well I'm putting the 10/15/20 combo version together and its been more of a problem. Can't get a good SWR, about 2:1 is the very best I can do on any of the bands.

Each antenna has an SO259 connector and each antenna is connected in parallel via short piece of twinlead. So I don't know which antenna I really should connect my coax to, the 10, 15, or 20? Anyone have experice with the 10/15/20 combo who can offer some suggestions....

George - KI4FIA - Daytona Beach, FL
http://www.MilAirComms.com

444. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 02:59:25 UTC
From: hillbilly3302 <davesradio@alltel.net>
Message-ID: <jC0Kc.3595$ab.1465@fe39.usenetserver.com>
Source record: 92365

why not just make a little vertical dipole... each leg should be about 8
3/4 inches long.... but expect complains from the neighbors
--
k5drc
Table Rock Lake
Ar/Mo State Line

"Ken" <cprstn54zz@att.net> wrote in message
news:o67bf05i80re6lj1cf9dq8hqijg2v4ed5g@4ax.com...
> I need to increase the range on my Heath-Zenith wireless doorbell.
>
> I believe it operates on 315 mHz.
>
> The antenna in the remote/transmitter looks like loop of length 1.5".
> The antenna in the ringer/receiver is a wire 1.5" long that ends in
> the breeze.
>
> It would appear safest to lengthen the wire in the ringer/receiver to
> around 7" but I do not understand why the manufacturer just didn't
> make it longer in the first place.
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

445. Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 04:37:57 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0407162037.6170399a@posting.google.com>
Source record: 92366

FYI:
CP = Circular Polarization
RHCP = Right Hand CP
LHCP = Left Hand CP
FYI = For your information ;-)

New concept...?

If one were to arrange for the emission of a RHCP signal, and the same - but inverted - LHCP signal, then the resultant composite 'dual-CP' emission should be more-or-less undetectable by any linear antenna. This is because a linear antenna in any orientation would respond equally to both circular senses and, since one sense carries the inverted signal, they'd cancel out (within the linear antenna) to the degree that balance and symmetry is maintained.

Only an appropriate CP antenna would be able to extract the 'dual-CP' signal. Obviously - use a more complex 'dual-CP' antenna system to extract both senses, suitably de-invert one, and then combine at RF for purposes of improving S/N by +3dB.

Since the RHCP and LHCP senses are inherently isolated from each other, there doesn't seem to be any reason why such a 'dual-CP' signal couldn't be easily generated and extracted. The RF hardware implementation is fairly obvious (nearly trivial).

Also, that such a 'dual-CP' signal would be more-or-less ignored by a linear antenna also seems obvious.

The most immediately-obvious application is a 'stealthy' transmission, at least until someone shows up with a bent whip on their receiver.

Interesting, but not that exciting.

Then the penny drops...

This concept could be applied to satellite broadcasting (for example) to provide ANOTHER (3rd) downlink polarization. In other words, for FSS satellite (for example) where they already use two linear polarizations (H and V) to double their effective bandwidth, this 'dual-CP' transmission technique could provide a '3rd axis' (thereby increasing the total effective bandwidth by another up to +50%).

The satellite example has the huge practical advantage over the 'stealthy' example in that the receiving station is co-operating (if his antenna is defective, he'll get it fixed). This co-operation would help to maintain isolation of the 3rd axis.

The isolation won't be perfect for various reasons (for example, perhaps Faraday rotation through the ionosphere would upset the CP balance). But the isolation doesn't have to be perfect for the new axis to provide valuable RF real estate.

The same sort of concept could also be applied at the baseband level thereby reducing some of the RF hardware while providing the same benefit on a transponder-by-transponder, narrower bandwidth, basis. It's an option to further explore anyway.

Any comments or technical objections?

de VE1BLL (Jeff)

PS: The '@rac.ca' e-mail is NOT monitored - respond in group only.

446. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 04:45:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10fhbmpr5l9q150@corp.supernews.com>
Source record: 92367

The sum of LHCP and RHCP fields of equal magnitude is a linearly
polarized field. The orientation of that linearly polarized field
depends on the relative phases of the LHCP and RHCP fields.

Roy Lewallen, W7EL

J. Harvey wrote:

> FYI:
> CP = Circular Polarization
> RHCP = Right Hand CP
> LHCP = Left Hand CP
> FYI = For your information ;-)
>
>
> New concept...?
>
> If one were to arrange for the emission of a RHCP signal, and the same
> - but inverted - LHCP signal, then the resultant composite 'dual-CP'
> emission should be more-or-less undetectable by any linear antenna.
> This is because a linear antenna in any orientation would respond
> equally to both circular senses and, since one sense carries the
> inverted signal, they'd cancel out (within the linear antenna) to the
> degree that balance and symmetry is maintained.
>
> Only an appropriate CP antenna would be able to extract the 'dual-CP'
> signal. Obviously - use a more complex 'dual-CP' antenna system to
> extract both senses, suitably de-invert one, and then combine at RF
> for purposes of improving S/N by +3dB.
>
> Since the RHCP and LHCP senses are inherently isolated from each
> other, there doesn't seem to be any reason why such a 'dual-CP' signal
> couldn't be easily generated and extracted. The RF hardware
> implementation is fairly obvious (nearly trivial).
>
> Also, that such a 'dual-CP' signal would be more-or-less ignored by a
> linear antenna also seems obvious.
>
> The most immediately-obvious application is a 'stealthy' transmission,
> at least until someone shows up with a bent whip on their receiver.
>
> Interesting, but not that exciting.
>
> Then the penny drops...
>

> This concept could be applied to satellite broadcasting (for example)
> to provide ANOTHER (3rd) downlink polarization. In other words, for
> FSS satellite (for example) where they already use two linear
> polarizations (H and V) to double their effective bandwidth, this
> 'dual-CP' transmission technique could provide a '3rd axis' (thereby
> increasing the total effective bandwidth by another up to +50%).
>
> The satellite example has the huge practical advantage over the
> 'stealthy' example in that the receiving station is co-operating (if
> his antenna is defective, he'll get it fixed). This co-operation would
> help to maintain isolation of the 3rd axis.
>
> The isolation won't be perfect for various reasons (for example,
> perhaps Faraday rotation through the ionosphere would upset the CP
> balance). But the isolation doesn't have to be perfect for the new
> axis to provide valuable RF real estate.
>
> The same sort of concept could also be applied at the baseband level
> thereby reducing some of the RF hardware while providing the same
> benefit on a transponder-by-transponder, narrower bandwidth, basis.
> It's an option to further explore anyway.
>
> Any comments or technical objections?
>
> de VE1BLL (Jeff)
>
> PS: The '@rac.ca' e-mail is NOT monitored - respond in group only.

447. Re: Wireless doorbell enhancement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 04:46:40 UTC
From: Steve <LafayetteRadio3@optonline.net>
Message-ID: <40F8AFD5.EDB42263@optonline.net>
Source record: 92368

:-)

Reg Edwards wrote:

> > My button rings my neighbor's bell and his rings mine. We both bought
> CHEAP
> > wireless doorbells.
> >
> ==========
>
> Have you tried swapping them ?

448. 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 05:12:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <0z2Kc.6703$gt1.1494@nwrddc02.gnilink.net>
Source record: 92369

Is there anyone interested in seeing pictures of a home made VHF slotted line?? I bought some copper pipe at Home Depot and built a 50 ohm line that seems to work very well.

Jerry

449. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 07:30:08 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <7WyiIBGAWN+AFAtn@ifwtech.co.uk>
Source record: 92370

Jerry Martes wrote:
> Is there anyone interested in seeing pictures of a home made VHF slotted
>line?? I bought some copper pipe at Home Depot and built a 50 ohm line
>that seems to work very well.

Definitely! (I'm always a sucker for VHF test equipment.)

H-P used to make one of these, in the form of a very deep trough-line with massively braced side castings. There was also a 'lite' copy in the old ARRL VHF Handbook.

If you can minimize the residual SWR (the variation in probe readings along the line when terminated in a precision 50R load) and other sources of variability, then you'll be able to make highly accurate vector impedance measurements at VHF.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

450. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 07:49:55 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <40f8d9dc$0$29378$626a14ce@news.free.fr>
Source record: 92271

Hello,

Just a simple dumb question: is it the "birdfeeder" that radiates or the
coaxial cable used between the transceiver and the miraculous antenna?

73 de F8BOE Olivier ...-.-

"GeorgeF" <av8tor@licensed4funREMOVEBEFOREFLIGHT.com> a crit dans le
message de news:RR_Jc.32$Dk6.10@bignews5.bellsouth.net...
> After reading many review of the Isotron antennas (the ones which look
> like birdfeeders!) I had bought a 40 meter version as well as the
> 10/15/20 combo.
>
> Put the 40 meter version up on a 12 foot mast, super easy to tune,
> worked great, 1.2:1 SWR across the 40 Meter CW portion of the band
> without the use of a tuner. Made better 40 meter CW contacts on the
> Isotron than on my dipole, I still can't believe how good that
> "birdfeeder" works.
>
> Well I'm putting the 10/15/20 combo version together and its been more
> of a problem. Can't get a good SWR, about 2:1 is the very best I can do
> on any of the bands.
>
> Each antenna has an SO259 connector and each antenna is connected in
> parallel via short piece of twinlead. So I don't know which antenna I
> really should connect my coax to, the 10, 15, or 20? Anyone have
> experice with the 10/15/20 combo who can offer some suggestions....
>
> George - KI4FIA - Daytona Beach, FL
> http://www.MilAirComms.com
>

451. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 08:55:18 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <WP5Kc.2233$lz2.951@nwrddc03.gnilink.net>
Source record: 92272

Ian

This line is showing a reflection of 1/10th of the incident voltage. I
am not inclined to refine the mismatch inherent with this construction at
this time. I dont require this line to be a "lab standard". I might try
to minimize the reflection later.
I tapered the line from 2 inch OD down to BNC in only about 3 1/2 inches.
And, I made no attempt to account for the teflon discs used to hold the
center conductor in the center of the line.
I dont even have enough stuff to evaluate the adapters from N to BNC. I
assume the reflection at 137 MHZ is acceptable to me. I sure cant do
anything about adapters from N to BNC anyway.

The slotted line does provide a flat voltage at the probe for all points
along the slot when it is terminated with the BNC 50 ohm load. Nothing I
have here is quality test equipment.
I'm impressed with the fact that I was able to measure load impedances
pretty accurately when they are outside the 1.5 to 1. VSWR circle.

It impresses me that a slotted line can be so easily constructed with
"Home Depot" stuff and still give alot of information on load impedance..

Jerry

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:7WyiIBGAWN+AFAtn@ifwtech.co.uk...
> Jerry Martes wrote:
> > Is there anyone interested in seeing pictures of a home made VHF
slotted
> >line?? I bought some copper pipe at Home Depot and built a 50 ohm line
> >that seems to work very well.
>
> Definitely! (I'm always a sucker for VHF test equipment.)
>
> H-P used to make one of these, in the form of a very deep trough-line
> with massively braced side castings. There was also a 'lite' copy in the
> old ARRL VHF Handbook.
>
> If you can minimize the residual SWR (the variation in probe readings
> along the line when terminated in a precision 50R load) and other
> sources of variability, then you'll be able to make highly accurate
> vector impedance measurements at VHF.
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)

> http://www.ifwtech.co.uk/g3sek

452. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 10:10:21 UTC
From: K4SQR@juno.com
Message-ID: <7c8be5b4.0407170210.65a60ace@posting.google.com>
Source record: 92273

Before buying from Cable Experts, visit the Product Review section and
click on coax cables then their name. Most of the descriptions/ratings
rate them as poor.
I recall there is also a photo showing improper installed connecter!
73, Jim

"Old Ed" <eXseniorsDeleteThisAndTheX@earthlink.net> wrote in message
news:<Y4FJc.4323$Qu5.25@newsread2.news.pas.earthlink.net>...
> Hi Rick -
>
> You might also want to consider Cable X-perts CXP1318FX.
> The performance is similar, and it's probably more flexible, and cheaper.
>
> But they can also sell you the LMR400.
>
> http://www.cablexperts.com/cfdocs/cat.cfm?ItemGroup=1&itmsub=0&bskt=0&USA_ship=1&c=0
>
> 73, Ed
>
> "Rick" <temp1@cfl.rr.com> wrote in message
> news:8986633b.0407141114.5c5a7bbf@posting.google.com...
> > Trying to locate a cheap source for Times LMR400-DB coax. Need about 100'.
> Anybody?
> >
> > IA

453. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 12:10:37 UTC
From: GeorgeF <av8tor@licensed4funREMOVEBEFOREFLIGHT.com>
Message-ID: <_G8Kc.507$kb1.148@bignews6.bellsouth.net>
Source record: 92274

F8BOE wrote:

> Hello,
>
> Just a simple dumb question: is it the "birdfeeder" that radiates or the
> coaxial cable used between the transceiver and the miraculous antenna?
>
> 73 de F8BOE Olivier ...-.-
>

I belive its the two metal places, one above and one below the coil
which are to form a capacitor.

George

454. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 12:11:22 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VrCdnf3AxuTwimTdRVn-tw@crocker.com>
Source record: 92275

"J. Harvey" <VE1BLL@rac.ca> wrote in message
news:8a615218.0407162037.6170399a@posting.google.com...

> Any comments or technical objections?
>
if this were that obvious to you, and it would work as described, it would already be in wide use. i haven't had enough caffeine yet to explain why, but somehow i think you would get complete cancellation and there would be no propagation at all.

455. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 12:13:39 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3_idnfEVvdprimTdRVn-hw@crocker.com>
Source record: 92276

"GeorgeF" <av8tor@licensed4funREMOVEBEFOREFLIGHT.com> wrote in message
news:RR_Jc.32$Dk6.10@bignews5.bellsouth.net...
> After reading many review of the Isotron antennas (the ones which look
> like birdfeeders!) I had bought a 40 meter version as well as the
> 10/15/20 combo.

did any of the reviews test out how well the manufacturer supports their
product? maybe you could try that route and report back on how responsive
they are to problems?

456. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 13:05:29 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <tu9Kc.2724$lz3.864@nwrddc01.gnilink.net>
Source record: 92277

"GeorgeF" <av8tor@licensed4funREMOVEBEFOREFLIGHT.com> wrote in message
news:_G8Kc.507$kb1.148@bignews6.bellsouth.net...
>
>
> F8BOE wrote:
>
> > Hello,
> >
> > Just a simple dumb question: is it the "birdfeeder" that radiates or the
> > coaxial cable used between the transceiver and the miraculous antenna?
> >
> > 73 de F8BOE Olivier ...-.-
> >
>
> I belive its the two metal places, one above and one below the coil
> which are to form a capacitor.
>
> George
>
I seem to recall an indepth analysis on the AntennEx site showing that it
was the shield on the coax that did the majority of the radiating. A simple
proof would be to change the coaxial feeder length or how it is physically
run and look for VSWR changes.

Dale W4OP

457. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 13:47:53 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <d6aKc.5304$mL5.2273@newsread1.news.pas.earthlink.net>
Source record: 92278

Hi Jim -

It's not clear (to me) exactly what you mean by "Product Review section;"
but I checked the reviews on eHam.net.

I was surprised to find that X-perts quality control on connectors was
criticized by a number of hams. Mine have all been fine; but I do place
some weight on eHam reviews.

I don't know whether Rick is looking for ready-made assemblies, or just
bulk cable. And I don't know if DavisRF offers ready-made assemblies,
or not. But my current thinking is that either the 1318 cable from X-perts,
OR the Bury-Flex from Davis would be good cable, as such.

As for assemblies, the X-perts stuff is MUCH better than the no-name,
cheap assemblies I previously bought from HRO. But the eHam reviews
have convinced me that X-perts has (or had) some serious quality control
problems with their connectors. It also sounds like they didn't take very
good care of their customers when problems turned up.

73, Ed

"Jim" <K4SQR@juno.com> wrote in message
news:7c8be5b4.0407170210.65a60ace@posting.google.com...
> Before buying from Cable Experts, visit the Product Review section and
> click on coax cables then their name. Most of the descriptions/ratings
> rate them as poor.
> I recall there is also a photo showing improper installed connecter!
> 73, Jim
>
> "Old Ed" <eXseniorsDeleteThisAndTheX@earthlink.net> wrote in message
news:<Y4FJc.4323$Qu5.25@newsread2.news.pas.earthlink.net>...
> > Hi Rick -
> >
> > You might also want to consider Cable X-perts CXP1318FX.
> > The performance is similar, and it's probably more flexible, and
cheaper.
> >
> > But they can also sell you the LMR400.
> >
> >
http://www.cablexperts.com/cfdocs/cat.cfm?ItemGroup=1&itmsub=0&bskt=0&USA_ship=1&c=0
> >
> > 73, Ed
> >
> > "Rick" <temp1@cfl.rr.com> wrote in message

> > news:8986633b.0407141114.5c5a7bbf@posting.google.com...
> > > Trying to locate a cheap source for Times LMR400-DB coax. Need about
100'.
> > Anybody?
> > >
> > > IA

458. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 14:05:34 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <OmaKc.6151$Qu5.3395@newsread2.news.pas.earthlink.net>
Source record: 92279

Yes, post the pics, instructions, etc, please. Or email to
jocjoatmindspringdotcom, if you prefer. Many thanks.

John

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:WP5Kc.2233$lz2.951@nwrddc03.gnilink.net...
> Ian
>
> This line is showing a reflection of 1/10th of the incident voltage. I
> am not inclined to refine the mismatch inherent with this construction at
> this time. I dont require this line to be a "lab standard". I might try
> to minimize the reflection later.
> I tapered the line from 2 inch OD down to BNC in only about 3 1/2
inches.
> And, I made no attempt to account for the teflon discs used to hold the
> center conductor in the center of the line.
> I dont even have enough stuff to evaluate the adapters from N to BNC. I
> assume the reflection at 137 MHZ is acceptable to me. I sure cant do
> anything about adapters from N to BNC anyway.
>
> The slotted line does provide a flat voltage at the probe for all points
> along the slot when it is terminated with the BNC 50 ohm load. Nothing I
> have here is quality test equipment.
> I'm impressed with the fact that I was able to measure load impedances
> pretty accurately when they are outside the 1.5 to 1. VSWR circle.
>
> It impresses me that a slotted line can be so easily constructed with
> "Home Depot" stuff and still give alot of information on load impedance..
>
> Jerry
>
>
>
> "Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
> news:7WyiIBGAWN+AFAtn@ifwtech.co.uk...
> > Jerry Martes wrote:
> > > Is there anyone interested in seeing pictures of a home made VHF
> slotted
> > >line?? I bought some copper pipe at Home Depot and built a 50 ohm
line
> > >that seems to work very well.
> >
> > Definitely! (I'm always a sucker for VHF test equipment.)
> >

> > H-P used to make one of these, in the form of a very deep trough-line
> > with massively braced side castings. There was also a 'lite' copy in the
> > old ARRL VHF Handbook.
> >
> > If you can minimize the residual SWR (the variation in probe readings
> > along the line when terminated in a precision 50R load) and other
> > sources of variability, then you'll be able to make highly accurate
> > vector impedance measurements at VHF.
> >
> >
> > --
> > 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> > http://www.ifwtech.co.uk/g3sek
>
>

459. Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 14:27:16 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10fidrdflcpnnda@corp.supernews.com>
Source record: 92280
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

I am new to HF having just passed my General and code tests. I am putting up a dipole the will be running due East/West at about 40ft. I really have no other options for installation and cannot run it North/South. I am in lower Michigan. My question is will I be able to make any East Coast contacts with this? Specifically, I'd like to be able to monitor the W1AW bulletins, code runs etc. I am interested in contacting the Southern states, but would like to know if the East will be accessable.

Thanks in advance,
Doug Birky
KC8YEC/AG

460. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 14:37:42 UTC
From: GeorgeF <av8tor@licensed4funREMOVEBEFOREFLIGHT.com>
Message-ID: <TQaKc.327$Ak7.4@bignews4.bellsouth.net>
Source record: 92281

>>
>
> I seem to recall an indepth analysis on the AntennEx site showing that it
> was the shield on the coax that did the majority of the radiating. A simple
> proof would be to change the coaxial feeder length or how it is physically
> run and look for VSWR changes.
>
> Dale W4OP

Originally where I had the 40 Meter Isotron located I was using about a 50' coax run (RF-9913). I the moved the antenna to a different position and had to add about 25' more of coax. The additional coax caused SWR to jump from about 1.2:1 to 1.4:1. A quick returning of the "tuning rod" on the antenna brought it back to 1.2:1

Last night I was doing more playing with the 10/15/20 combo, was able to get the 20 meter size down to 1.2:1 and had about a 300 KHz bandwith to say under 2:1 SWR so I'm happy with that. But still can't get the 10 & 15 meters to do any better than 3:1. It possibly might be the location of the ant as its pretty close to some electical house wiring?

George

461. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 14:45:02 UTC
From: Dave <noone@nowhere.com>
Message-ID: <IKCdnfCEB9HspmTd4p2dnA@crocker.com>
Source record: 92282
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

congratulations.

and yes, at 40' the dipole will not be very directional except maybe on 17m
and up, and even there you will still hear, probably just not as loud.

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10fidrdflcpnnda@corp.supernews.com...
> I am new to HF having just passed my General and code tests. I am putting
up
> a dipole the will be running due East/West at about 40ft. I really have
no
> other options for installation and cannot run it North/South. I am in
lower
> Michigan. My question is will I be able to make any East Coast contacts
> with this? Specifically, I'd like to be able to monitor the W1AW
bulletins,
> code runs etc. I am interested in contacting the Southern states, but
would
> like to know if the East will be accessable.
>
> Thanks in advance,
> Doug Birky
> KC8YEC/AG
>
>

462. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 15:26:04 UTC
From: "Dee D. Flint" <deeflint01@comcast.net>
Message-ID: <FPednf8QE8F32WTd4p2dnA@comcast.com>
Source record: 92283
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10fidrdflcpnnda@corp.supernews.com...
> I am new to HF having just passed my General and code tests. I am putting
up
> a dipole the will be running due East/West at about 40ft. I really have
no
> other options for installation and cannot run it North/South. I am in
lower
> Michigan. My question is will I be able to make any East Coast contacts
> with this? Specifically, I'd like to be able to monitor the W1AW
bulletins,
> code runs etc. I am interested in contacting the Southern states, but
would
> like to know if the East will be accessable.
>
> Thanks in advance,
> Doug Birky
> KC8YEC/AG

It may or may not be accessible. However, you can dramatically improve the situation by setting the dipole up as an inverted V. As such, it pretty much becomes omnidirectional.

Dee D. Flint, N8UZE

463. Circularly Polarized for LPFM

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 15:28:59 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10fihd5h8vl6486@corp.supernews.com>
Source record: 92284

Dear Group:

A popular antenna for LPFM stations is an antenna that I call an OI antenna (because of its appearance). It consists of about 0.25 wave lengths (WL) of thick wire shaped into a circle [the O] in the horizontal plane with about 0.125 WL of thick wire in the vertical plane connected to each end of the circle [the I]. In other words, it is essentially a 0.5 WL dipole with one leg extending from the center to the left in a horizontal circle that then points down while the other leg extends to the right in a horizontal circle that then points up.

Commercial examples are the Telecom TFC1K and the well built Dielectric DCR-L. Most often, two of the antennas are used vertically spaced by 1 WL and driven in phase. All venders characterize the antenna as being circularly polarized.

1. What is (are) the conventional name for this antenna? I have not been able to find it in any of my references.

2. When I model one bay of the antenna I find that almost all of the radiation is vertically polarized. This is not at all surprising in view of the symmetry of the horizontal element [the O].
What might I be doing wrong?

Speculation: I may not have the dimensions correct though the antenna I modeled is resonant at 94 MHz. It is possible that venders are equating omni-directional-in-the-horizontal-plane with circularly polarized.

I have an EZNEC file that I will send to anyone who wishes it.

The impetus for these questions is a determination of an appropriate offset of these antennas from a large diameter tower.

Thanks in advance for your insight.
73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

464. Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 15:30:16 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <amgif0dptot85r367e2sj0ebo74s4fjhkv@4ax.com>
Source record: 92285

I can't find this in any of my books, so thought I ask the group:

For my general station ground, I have a copper pipe that goes down
about one foot -- then hits rock or limestone or whatever.

I'd like to enhance the pipe with a few buried radials. I happen to
have a 500' roll of 14-guage stranded *insulated* copper wire. Will
the insulation keep the wire from becoming "one with the dirt"?

Or should I go buy some bare solid copper wire?

Tnx,

Bob
k5qwg

465. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 15:57:39 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cdbi9j$3ub$1@mail.specsol.com>
Source record: 92286

Bob Miller <bxmillerNoSpam@texas.net> wrote:
> I can't find this in any of my books, so thought I ask the group:

> For my general station ground, I have a copper pipe that goes down
> about one foot -- then hits rock or limestone or whatever.

> I'd like to enhance the pipe with a few buried radials. I happen to
> have a 500' roll of 14-guage stranded *insulated* copper wire. Will
> the insulation keep the wire from becoming "one with the dirt"?

> Or should I go buy some bare solid copper wire?

> Tnx,

> Bob
> k5qwg

This has been hashed over many times. A google search will provide all
the details.

Bottom line:

If you want a DC ground, bare wire or bury your ground rod in a trench.

If you want a RF ground, it doesn't matter.

--
Jim Pennino

Remove -spam-sux to reply.

466. Re: Circularly Polarized for LPFM

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 16:25:12 UTC
From: German NG Server <rfry@adams.net>
Message-ID: <2lt27dFgek11U1@uni-berlin.de>
Source record: 92287

"J. McLaughlin" <JCM@Power-Net.Net> wrote
>
> 1. What is (are) the conventional name for this antenna? I have not
> been able to find it in any of my references.

Commonly called a "ring-stub" element. It was one of the earliest methods of adding v-pol to an omni h-pol antenna of the "ring" design, popular before CP was authorized by the FCC.

> 2. When I model one bay of the antenna I find that almost all of the
> radiation is vertically polarized. This is not at all surprising in
> view of the symmetry of the horizontal element [the O].
> What might I be doing wrong?

There is a considerable h-pol component from the portion of the element in the horizontal plane. But as h-pol and v-pol do not have the same radiation center from this design AND the horizontal part of the radiator generates a v-pol component for elevation angles not in the horizontal plane, the axis of net maximum v-pol radiation in a ring-stub element is not located in the vertical plane.

The PDF slide show (Paper 10) at http://rfry.org includes NEC2 pattern studies of this and three other types of FM broadcast transmit elements, showing the differences in their free-space surface patterns without the effects of the tower.

> Speculation: I may not have the dimensions correct though the antenna I
> modeled is resonant at 94 MHz. It is possible that venders are equating
> omni-directional-in-the-horizontal-plane with circularly polarized.
>
> I have an EZNEC file that I will send to anyone who wishes it.
>
> The impetus for these questions is a determination of an appropriate
> offset of these antennas from a large diameter tower.

Paper 6 at http://rfry.org shows some of the affects of two nearby tower structures on sidemounted FM broadcast transmit elements for one set of conditions. Unfortunately the patterns cannot be applied to any other conditions.

The best approach is to have the patterns measured by the antenna OEM, using one or more mounting configurations preferred or possible in the final installation.

R. Fry

467. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 17:35:48 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10fiot05ut5ev2a@corp.supernews.com>
Source record: 92288
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Are you saying that with the inverted V I am more likely to hear the W1AW?

Dee D. Flint <deeflint01@comcast.net> wrote in message
news:FPednf8QE8F32WTd4p2dnA@comcast.com...
>
> "Doug Birky" <dgbirky@voyager.net> wrote in message
> news:10fidrdflcpnnda@corp.supernews.com...
> > I am new to HF having just passed my General and code tests. I am
putting
> up
> > a dipole the will be running due East/West at about 40ft. I really have
> no
> > other options for installation and cannot run it North/South. I am in
> lower
> > Michigan. My question is will I be able to make any East Coast contacts
> > with this? Specifically, I'd like to be able to monitor the W1AW
> bulletins,
> > code runs etc. I am interested in contacting the Southern states, but
> would
> > like to know if the East will be accessable.
> >
> > Thanks in advance,
> > Doug Birky
> > KC8YEC/AG
>
>
> It may or may not be accessible. However, you can dramatically improve
the
> situation by setting the dipole up as an inverted V. As such, it pretty
> much becomes omnidirectional.
>
> Dee D. Flint, N8UZE
>

468. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 17:37:47 UTC
From: kashe@sonic.net
Message-ID: <proif0lb8r0mte1jr4fj4vtaeeb5mpaopc@4ax.com>
Source record: 92289

On Sat, 17 Jul 2004 12:11:22 -0000, "Dave" <noone@nowhere.com> wrote:

>
>"J. Harvey" <VE1BLL@rac.ca> wrote in message
>news:8a615218.0407162037.6170399a@posting.google.com...
>
>> Any comments or technical objections?
>>
>if this were that obvious to you, and it would work as described, it would
>already be in wide use.

So let's save some federal money by shutting down the USPTO.
Everything useful that works has already been thought of, so there's
no need for them any more.

> i haven't had enough caffeine yet to explain why,
>but somehow i think you would get complete cancellation and there would be
>no propagation at all.
>

469. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 18:09:30 UTC
From: Dave <noone@nowhere.com>
Message-ID: <56idnawgX87A9mTdRVn-uQ@crocker.com>
Source record: 92290
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

thats what he's saying. inverted V's are a bit less directional than true straight dipoles... and usually easier to put up.

"Doug Birky" <dgbirky@voyager.net> wrote in message news:10fiot05ut5ev2a@corp.supernews.com...
> Are you saying that with the inverted V I am more likely to hear the W1AW?
>
> Dee D. Flint <deeflint01@comcast.net> wrote in message
> news:FPednf8QE8F32WTd4p2dnA@comcast.com...
> >
> > "Doug Birky" <dgbirky@voyager.net> wrote in message
> > news:10fidrdflcpnnda@corp.supernews.com...
> > > I am new to HF having just passed my General and code tests. I am
> putting
> > up
> > > a dipole the will be running due East/West at about 40ft. I really
have
> > no
> > > other options for installation and cannot run it North/South. I am in
> > lower
> > > Michigan. My question is will I be able to make any East Coast
contacts
> > > with this? Specifically, I'd like to be able to monitor the W1AW
> > bulletins,
> > > code runs etc. I am interested in contacting the Southern states, but
> > would
> > > like to know if the East will be accessable.
> > >
> > > Thanks in advance,
> > > Doug Birky
> > > KC8YEC/AG
> >
> >
> > It may or may not be accessible. However, you can dramatically improve
> the
> > situation by setting the dipole up as an inverted V. As such, it pretty
> > much becomes omnidirectional.
> >
> > Dee D. Flint, N8UZE
> >
>
>

470. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 18:11:39 UTC
From: Dave <noone@nowhere.com>
Message-ID: <xJydnV75ofhD9mTdRVn-uw@crocker.com>
Source record: 92291

```
good idea, they are just another way for lawyers to make money. any new
idea gets ripped off as soon as its out anyway with cheap imitations... and
then lawyers make more money suing the infringers if they can get a hand on
them.

<kashe@sonic.net> wrote in message
news:proif0lb8r0mte1jr4fj4vtaeeb5mpaopc@4ax.com...
> On Sat, 17 Jul 2004 12:11:22 -0000, "Dave" <noone@nowhere.com> wrote:
>
> >
> >"J. Harvey" <VE1BLL@rac.ca> wrote in message
> >news:8a615218.0407162037.6170399a@posting.google.com...
> >
> >> Any comments or technical objections?
> >>
> >if this were that obvious to you, and it would work as described, it
would
> >already be in wide use.
>
> So let's save some federal money by shutting down the USPTO.
> Everything useful that works has already been thought of, so there's
> no need for them any more.
>
> > i haven't had enough caffeine yet to explain why,
> >but somehow i think you would get complete cancellation and there would
be
> >no propagation at all.
> >
>
```

471. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 18:14:47 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <5olif0hk8usnf6b6l1v23ud9kthqjqcck9@4ax.com>
Source record: 92292

On Sat, 17 Jul 2004 08:30:08 +0100, "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
wrote:

>Jerry Martes wrote:
>> Is there anyone interested in seeing pictures of a home made VHF slotted
>>line?? I bought some copper pipe at Home Depot and built a 50 ohm line
>>that seems to work very well.
>
>Definitely! (I'm always a sucker for VHF test equipment.)
>
>H-P used to make one of these, in the form of a very deep trough-line
>with massively braced side castings. There was also a 'lite' copy in the
>old ARRL VHF Handbook.
>
>If you can minimize the residual SWR (the variation in probe readings
>along the line when terminated in a precision 50R load) and other
>sources of variability, then you'll be able to make highly accurate
>vector impedance measurements at VHF.
Hello, Ian,
here's a little trivia concerning slotted lines you might find interesting. I developed all the antenna systems that flew on the World's first weather satellite, TIROS 1, in late 1957, which flew April 1, 1960. The system operated on four different frequencies, two around 108 MHz and two around 235 MHz. Circular polarization was required, and was achieved using four crossed unipoles working against the body of the satellite. Each unipole used a 1/4wl sleeve for the high-frequency portion with a coaxial extension for the lower frequency, decoupled by the sleeve for the higher frequency. The sleeve portion was was developed to yield a 50 + j0 terminal impedance that included the mutual impedance of the extended portion. The extension portion was developed to provide as low an SWR as possible at the lower frequency. The coupling system for feeding the four radiators with four transmitters simultaneously was designed in stripline.

Now, getting to the point of the story, the development of the radiating elements was performed before there were any network analyzers--I performed ALL the work using only a slotted line for hundreds and hundreds of measurements. The line was an HP-805, that couldn't cover the frequencies involved, so I used 4:1 scale modeling at 432 and 940 MHz. The radiator development was done using a single element over a ground plane, with the spacecraft modeled with a 4:1 half shell mounted on a 4' x 4' aluminum plate for the ground plane.

If you have a copy of Reflections II you can see a picture of my lab setup at the RCA Laboratories in Princeton, NJ, showing the ground plane and the HP-805 slotted line. Incidentally, in 1957 there were no hand calculators either--my calculations from the line measurements were all made with a slide rule. Just

picture the amount of work involved using such antiquated equipment compared with what we could do now using today's more sophisticated instrumentation.

Walt Maxwell, W2DU

472. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 18:29:48 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <4irif09t8eatt50rckbjqa1dg9jm4s0k86@4ax.com>
Source record: 92293

On Sat, 17 Jul 2004 18:11:39 -0000, "Dave" <noone@nowhere.com> wrote:

>good idea, they are just another way for lawyers to make money. any new
>idea gets ripped off as soon as its out anyway with cheap imitations... and
>then lawyers make more money suing the infringers if they can get a hand on
>them.
>
><kashe@sonic.net> wrote in message
>news:proif0lb8r0mte1jr4fj4vtaeeb5mpaopc@4ax.com...
>> On Sat, 17 Jul 2004 12:11:22 -0000, "Dave" <noone@nowhere.com> wrote:
>>
>> >
>> >"J. Harvey" <VE1BLL@rac.ca> wrote in message
>> >news:8a615218.0407162037.6170399a@posting.google.com...
>> >
>> >> Any comments or technical objections?
>> >>
>> >if this were that obvious to you, and it would work as described, it
>would
>> >already be in wide use.
>>
>> So let's save some federal money by shutting down the USPTO.
>> Everything useful that works has already been thought of, so there's
>> no need for them any more.
>>
>> > i haven't had enough caffeine yet to explain why,
>> >but somehow i think you would get complete cancellation and there would
>be
>> >no propagation at all.

Without giving the problem any serious mathematical or physical thought, only knee-jerk intuition, IMO, if a radiator suitable for radiating CP of either hand were fed with equal signals leading to both RHCP and LHCP simultaneously, I agree with the poster above that complete cancelation would result, and there would be no radiation.

This is why a linearly-polarized antenna could not receive any energy. (har har)

Walt, W2DU

473. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 19:01:19 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <3$9xyeK$dX+AFAu$@ifwtech.co.uk>
Source record: 92294

Walt wrote:
>
>If you have a copy of Reflections II you can see a picture of my lab
>setup at the RCA Laboratories in Princeton, NJ, showing the ground
>plane and the HP-805 slotted line.

Did that line just look like you could drive a tank across it, or did
you try?

>Incidentally, in 1957 there were no hand calculators either--my
>calculations from the line measurements were all made with a slide
>rule. Just picture the amount of work involved using such antiquated
>equipment compared with what we could do now using today's more
>sophisticated instrumentation.
>
That's the irony of it: if they'd been able to connect modern computing
power to a simple slotted line, they might never have bothered to invent
the network analyser :-)

Actually, slotted lines and computers might just about have overlapped.
I'll bet that, somewhere on an 8-inch disk in a forgotten landfill,
there are programs that say:

Connect Short to Slotted Line and Press Enter >
Enter Voltage >
Connect 50 ohm Load to Slotted Line and Press Enter >
Enter Voltage >
Connect ...

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

474. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 19:10:53 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <UQeKc.17318$9I.16487@okepread02>
Source record: 92295

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:40f83e69$1_3@corp.newsgroups.com...
> Brian Kelly wrote:
> > But . . but . . so the cop punches the button, turns loose a monster
> > burst of RF and the perp's engine sputters out.
>
> What prevents the perp from having his own RF gun? Are the cops
> going to be driving 1960 Pontiacs?
> --
> 73, Cecil http://www.qsl.net/w5dxp

They should be so lucky! In 60, Pontiac was building a race rep, and a friend of mine bought a 3/4 race special factory package Bonneville. It may have been heavy, and the front hood looked like the horizon, but you could chirp the tires at 80 MPH going into 4th! IIRC, also about 6 MPG. It would make one fantastic freeway cruiser.

Ed
wb6wsn

475. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 19:23:50 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <01fKc.17357$9I.3219@okepread02>
Source record: 92296

"Brian Kelly" <kelly@dvol.com> wrote in message
news:d22b54c3.0407160546.33df12d1@posting.google.com...

SNIP

>
> But . . but . . so the cop punches the button, turns loose a monster
> burst of RF and the perp's engine sputters out. What prevents the RF
> from also shutting down the engine in the Looney Van? The cops will be
> issued Looney Vans equipped with RF-proof 1956 Stromberg carburetors
> or what?? That would thrill the EPA and the EU envirofreaks no end . .

Maybe you haven't noticed it, but government regularly exempts itself from
the picky regulations that they impose on the general populace.

It's not the carb that's the RF sensitive element, it's the Engine Control
Computer which the zappers attempt to toast. That means that the ideal
immune vehicle would be about pre-1980, with a Kettering ignition system.
However, the 70's cars were notorious for trying to reduce exhaust emissions
with pneumatics, thermal delays, and other non-electronic systems. Those
systems created balky, stall-prone engines, so we need to move the date back
to about 1970.

Ed
wb6wsn

476. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 19:28:43 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86wu12ph5g.fsf@duchess.twilley.org>
Source record: 92297

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

>>>>> "Dale" == Dale Parfitt <par@parelectronics.com> writes:

[... GeorgeF asked about Isotrons ...]

Dale> I seem to recall an indepth analysis on the AntennEx site
Dale> showing that it was the shield on the coax that did the majority
Dale> of the radiating. A simple proof would be to change the coaxial
Dale> feeder length or how it is physically run and look for VSWR
Dale> changes.

So if someone tells me about a crazy antenna that "just works" but
which relies on the feedline being straight and not coiled, I should
suspect it to be Isotron-like in design and effect?

Dale> Dale W4OP

Jack.
(figuring someone with field-strength meters could solve this)
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.4 (FreeBSD)

iD8DBQFA+X4jGPFSfAB/ezgRAmcwAJ41qbL4qKwqFoQeT5X4DPow49nJUgCgvmmf
/uBNEl/heAnZpn1VwHjoAQc=
=8OqZ
-----END PGP SIGNATURE-----
```

477. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 19:37:37 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <ffvif09aol7tmg6fogu7elvttagpoe7kai@4ax.com>
Source record: 92298

On Sat, 17 Jul 2004 20:01:19 +0100, "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
wrote:
>
>Did that line just look like you could drive a tank across it, or did
>you try?

Yes, Ian, you COULD have driven a tank across it, it was constructed of a massive hunk of aluminum with reinforcing segments to prevent physical distortion. It measured better than 1.02 SWR with a precision 50-ohm resistive load.

>Actually, slotted lines and computers might just about have overlapped.
>I'll bet that, somewhere on an 8-inch disk in a forgotten landfill,
>there are programs that say:
>
>Connect Short to Slotted Line and Press Enter >
>Enter Voltage >
>Connect 50 ohm Load to Slotted Line and Press Enter >
>Enter Voltage >
>Connect ...

Probably so, I still have a few 8" disks lying around, just so I can show and tell my great grandchildren (and I have five) what the early days of computers were using for memory.

I'm going to scan the pic in Reflections and email it to you in JPEG format.

Walt, W2DU

478. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 19:50:27 UTC
From: "Dee D. Flint" <deeflint01@comcast.net>
Message-ID: <x6WdnQvAy_R9H2TdRVn-tw@comcast.com>
Source record: 92299
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Yes you should have better reception of W1AW on an inverted V dipole that a straight dipole when you are limited in picking the orientation.

By the way, I'm a YL not an OM.

Dee D. Flint, N8UZE

"Dave" <noone@nowhere.com> wrote in message
news:56idnawgX87A9mTdRVn-uQ@crocker.com...
> thats what he's saying. inverted V's are a bit less directional than true
> straight dipoles... and usually easier to put up.
>
> "Doug Birky" <dgbirky@voyager.net> wrote in message
> news:10fiot05ut5ev2a@corp.supernews.com...
> > Are you saying that with the inverted V I am more likely to hear the
W1AW?
> >
> > Dee D. Flint <deeflint01@comcast.net> wrote in message
> > news:FPednf8QE8F32WTd4p2dnA@comcast.com...
> > >
> > > "Doug Birky" <dgbirky@voyager.net> wrote in message
> > > news:10fidrdflcpnnda@corp.supernews.com...
> > > > I am new to HF having just passed my General and code tests. I am
> > putting
> > > > up
> > > > a dipole the will be running due East/West at about 40ft. I really
> have
> > > > no
> > > > other options for installation and cannot run it North/South. I am
in
> > > > lower
> > > > Michigan. My question is will I be able to make any East Coast
> contacts
> > > > with this? Specifically, I'd like to be able to monitor the W1AW
> > > > bulletins,
> > > > code runs etc. I am interested in contacting the Southern states,
but
> > > > would
> > > > like to know if the East will be accessable.
> > > >
> > > > Thanks in advance,
> > > > Doug Birky
> > > > KC8YEC/AG
> > >

> > >
> > > It may or may not be accessible. However, you can dramatically
improve
> > the
> > > situation by setting the dipole up as an inverted V. As such, it
pretty
> > > much becomes omnidirectional.
> > >
> > > Dee D. Flint, N8UZE
> > >
> >
> >
>
>

479. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 20:27:03 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0407171227.4db6afe8@posting.google.com>
Source record: 92300

Roy Lewallen wrote:
> The sum of LHCP and RHCP fields of equal magnitude
> is a linearly polarized field. The orientation of
> that linearly polarized field depends on the
> relative phases of the LHCP and RHCP fields.

...and...

Walter Maxwell wrote:
> Without giving the problem any serious mathematical
> or physical thought, only knee-jerk intuition, IMO,
> if a radiator suitable for radiating CP of either
> hand were fed with equal signals leading to both
> RHCP and LHCP simultaneously, I agree with the
> poster above that complete cancelation would result,
> and there would be no radiation.
> This is why a linearly-polarized antenna could not
> receive any energy. (har har)

One of my assumptions is that the RHCP and LHCP can operate in complete isolation of each other. DBS satellites (for example) use RHCP and LHCP to double their bandwidth, just like FSS satellites use H and V. I have not heard anything about the DBS RHCP transponder having to worry about the LHCP transponder. I haven't heard any mention of nulls suddenly appearing and disappearing in the downlink passband as the two senses happen to coincide, out of phase. I haven't heard about the CP being converted to linear and causing interference (at -3dB) in the other CP mode.

I assume that the two CP signals have no knowledge of each other. The hardware can be designed (easily) to maintain that isolation - imagine the two transmitter hidden from each other and the signals just happen to be headed in the same direction. In other words - for purposes of argument - it doesn't have to be the same antenna.

It just so happens that, for this 'dual-CP' concept, the two CP signals happen to be the same but one is inverted. They don't have to 'know' about their evil mirror-image twin.

If they cancel out, then where does the energy go? Make it a mega-watt each and follow the smoke. If they combine in the vacuum of space, where is the smoke?

Appreciate your comments...

de VE1BLL

480. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 20:55:54 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <t43jf0t9q6eohlh17uko6qogqi7eo5n9oq@4ax.com>
Source record: 92301

On 17 Jul 2004 13:27:03 -0700, VE1BLL@rac.ca (J. Harvey) wrote:

>Roy Lewallen wrote:
>> The sum of LHCP and RHCP fields of equal magnitude
>> is a linearly polarized field. The orientation of
>> that linearly polarized field depends on the
>> relative phases of the LHCP and RHCP fields.
>
>...and...
>
>Walter Maxwell wrote:
>> Without giving the problem any serious mathematical
>> or physical thought, only knee-jerk intuition, IMO,
>> if a radiator suitable for radiating CP of either
>> hand were fed with equal signals leading to both
>> RHCP and LHCP simultaneously, I agree with the
>> poster above that complete cancelation would result,
>> and there would be no radiation.
>> This is why a linearly-polarized antenna could not
>> receive any energy. (har har)
>
>One of my assumptions is that the RHCP and LHCP can operate in
>complete isolation of each other. DBS satellites (for example) use
>RHCP and LHCP to double their bandwidth, just like FSS satellites use
>H and V. I have not heard anything about the DBS RHCP transponder
>having to worry about the LHCP transponder. I haven't heard any
>mention of nulls suddenly appearing and disappearing in the downlink
>passband as the two senses happen to coincide, out of phase. I haven't
>heard about the CP being converted to linear and causing interference
>(at -3dB) in the other CP mode.
>
>I assume that the two CP signals have no knowledge of each other. The
>hardware can be designed (easily) to maintain that isolation - imagine
>the two transmitter hidden from each other and the signals just happen
>to be headed in the same direction. In other words - for purposes of
>argument - it doesn't have to be the same antenna.
>
>It just so happens that, for this 'dual-CP' concept, the two CP
>signals happen to be the same but one is inverted. They don't have to
>'know' about their evil mirror-image twin.
>
>If they cancel out, then where does the energy go? Make it a mega-watt
>each and follow the smoke. If they combine in the vacuum of space,
>where is the smoke?

>
>Appreciate your comments...
>
>de VE1BLL

Hi Jeff, my age is showing. In my knee-jerk reaction I stupidly thought of applying the RH and LH sigs from the same source. Of course your concept works when the signals are supplied from two different sources. The two signals are totally oblivious to each other.

I know this is true, because it's exactly the method I used in developing the antennas for TIROS 1, the World's first weather satellite. The circuit concept I used there comprised a four-port hybrid ring, or rat race. The two transmitters fed two opposite input ports. Each of the ouput ports fed a two-port balun, each balun port feeding one terminal of a dipole. However, the line from one of the output ports had a 1/4wl extra length, and the dipole fed from this output port was oiented 90ï¿½ from the other. With this arrangement, the radiation of the signal entering one input port of the hybrid is inherently RHCP and from the other is LHCP. The signals from each transmitter were received on a linearly-polarized antenna at any orientation angle, with no mutual interference.

If you'd like I can send you a copy of the circuit diagram in jpg format. This coupling system was fabricated in stripline, so if you'd like, I'll also send you a copy of that. Actually, the total system comprised the use of four transmitters, with each pair operating in two different frequency bands. The total coupling system fed all four transmitters simultaneously into one antenna.

Please let me know if you'd like me to send the stuff.

Walt, W2DU

481. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:26:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10fj6d1j53smd87@corp.supernews.com>
Source record: 92302

J. Harvey wrote:
>
> One of my assumptions is that the RHCP and LHCP can operate in
> complete isolation of each other. . .

Some time ago, I stated that at any point in space there's a single field, and that we can split it into various components to suit our analytical needs. But the way we choose to split it or, conversely, the way it was created (from a single source or polarization, or multiple ones) doesn't alter the nature of the field in any way. I'm not sure if what I said was simply disbelieved or whether it was ignored -- the end result is the same.

The total field you get from simultaneous RHCP and LHCP waves is simple to see by using the index finger of each hand to represent the instantaneous orientation of the E field from each of two waves. Point the index finger of your left hand downward and the index finger of your right hand upward, knuckle-to-knuckle, so the fingers make a vertical line extending from one fingertip to the other. The left index finger will represent the LHCP wave and the right index finger the RHCP wave. At the beginning instant that we're illustrating, they're out of phase and sum to zero. So the field at that point and that time is zero.

Now rotate your left finger 45 degrees CCW and the right finger 45 degrees CW, to represent how the fields are oriented 1/8 period later or 1/8 wavelength away. If you add the two finger "vectors", you find the result is a field that's horizontal, pointing to the left, and 1.414 times the length of one finger. Rotate the fingers another 45 degrees, the left finger CCW and the right one CW. Now they're both pointing to the left, and the sum is a horizontal field with magnitude equal to 2 fingers. If you continue this process, you'll find that the sum of the two fields is always horizontal, and it oscillates between zero and two fingers in instantaneous amplitude. It is, in fact, exactly the same as and entirely indistinguishable from a horizontally polarized wave coming from, say, a dipole. You can reach the same conclusion mathematically from the equations I posted a few weeks ago.

If you run the same experiment beginning with the fingers in phase -- both pointing upwards -- you'll get a purely vertically polarized wave. And with other starting phase angles, you'll get linearly polarized waves of other orientations.

No magical energy distruction or disappearing takes place -- it's all accounted for. And you can receive it just fine with a dipole.

Roy Lewallen, W7EL

482. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:27:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f99acf$1_7@corp.newsgroups.com>
Source record: 92303

F8BOE wrote:
> Just a simple dumb question: is it the "birdfeeder" that radiates or the
> coaxial cable used between the transceiver and the miraculous antenna?

Translation: Isotrons make pretty good top hats. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

483. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:32:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f99bf3$1_7@corp.newsgroups.com>
Source record: 92305
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Doug Birky wrote:

> I am new to HF having just passed my General and code tests. I am putting up
> a dipole the will be running due East/West at about 40ft. I really have no
> other options for installation and cannot run it North/South. I am in lower
> Michigan. My question is will I be able to make any East Coast contacts
> with this? Specifically, I'd like to be able to monitor the W1AW bulletins,
> code runs etc. I am interested in contacting the Southern states, but would
> like to know if the East will be accessable.

Make the "dipole" multiple wavelengths long. The major lobes will move
toward the ends of the "dipole". (I say "dipole" because it is then
actually electrically a polypole.)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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484. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:32:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10fj6o4cvssnj79@corp.supernews.com>
Source record: 92304

Ed Price wrote:
> . . .
> That means that the ideal
> immune vehicle would be about pre-1980, with a Kettering ignition system. . .

My 1972 VW squareback had true electronic fuel injection controlled by a transistorized analog computer (made on a sturdy PCB with discrete components and tucked into a rear fender well). It did have a Kettering ignition system, but on 15 meters my HF rig would stop it dead in its tracks by shutting down the fuel injection.

Roy Lewallen, W7EL

485. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:43:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f99ea6_7@corp.newsgroups.com>
Source record: 92307

Ed Price wrote:

> "Cecil Moore" <w5dxp@hotmail.com> wrote:
>>What prevents the perp from having his own RF gun? Are the cops
>>going to be driving 1960 Pontiacs?
>
> They should be so lucky! In 60, Pontiac was building a race rep, and a
> friend of mine bought a 3/4 race special factory package Bonneville. It may
> have been heavy, and the front hood looked like the horizon, but you could
> chirp the tires at 80 MPH going into 4th! IIRC, also about 6 MPG. It would
> make one fantastic freeway cruiser.

The reason I asked is that I used to have one of those as a company car.
As I remember, it was 455 in^3. I used to drive the radar cops bats*it
by slowing down to 70 when approaching an overpass and then going 120 in
the straightaway out in West Texas. The radar cops *always* parked just
on the other side of an overpass in 1960.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

486. htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:44:33 UTC
From: Rafael Lopez <rlopez@sanbrunocable.com>
Message-ID: <10fj7cql5skbh5e@corp.supernews.com>
Source record: 92306

I just got this radio last night. It's supposed to have a built in
mic. How can I test the mic? What button do i push?
I already read the online manuals for it but it doesn't even tell you
how to do the most simplest things.

http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%20and%20Marine%20Radios&Reuse=N

thanks

487. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:48:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40f99fc3$1_7@corp.newsgroups.com>
Source record: 92308

Roy Lewallen wrote:
> If you run the same experiment beginning with the fingers in phase --
> both pointing upwards -- you'll get a purely vertically polarized wave.

Actually, I got the same two fingers back on the freeway the other day. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

488. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 21:55:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b46jf09m1iuaptpo09usm656ctml5e4d1c@4ax.com>
Source record: 92309

On 17 Jul 2004 13:27:03 -0700, VE1BLL@rac.ca (J. Harvey) wrote:
>One of my assumptions is that the RHCP and LHCP can operate in
>complete isolation of each other. DBS satellites (for example) use
>RHCP and LHCP to double their bandwidth, just like FSS satellites use
>H and V. I have not heard anything about the DBS RHCP transponder
>having to worry about the LHCP transponder. I haven't heard any
>mention of nulls suddenly appearing and disappearing in the downlink

That is because the nulls occur orthogonally to (and not along) the
path. ... At least in the sense of your thought-experiment.

>passband as the two senses happen to coincide, out of phase. I haven't
>heard about the CP being converted to linear and causing interference
>(at -3dB) in the other CP mode.

And possibly for a very good reason: the earth is thousands of miles
away where the subtended arc of the service region precludes more than
a few degrees difference in path length/delay. The initial phase
balance is preserved by geometry.

>If they cancel out, then where does the energy go? Make it a mega-watt
>each and follow the smoke. If they combine in the vacuum of space,
>where is the smoke?

Hi Jeff,

This is just a tarted up version of the multipath phenomenon otherwise
called the Fresnel Zone which, in turn is an example of the optics
display of Newton's rings. If the earth were flat (a presumption of
modelers), then you would observe concentric rings around the service
area that were alternately hot then cold. The earth isn't flat, but
that doesn't cast this effect into the unfathomable, it simple
distorts the progressively outer rings' widths.

73's
Richard Clark, KB7QHC

489. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 22:18:59 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <bu8jf090n2ql60beenvmhub3slnioln0bq@4ax.com>
Source record: 92310
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

On Sat, 17 Jul 2004 12:35:48 -0500, "Doug Birky" <dgbirky@voyager.net>
wrote:

>Are you saying that with the inverted V I am more likely to hear the W1AW?

Possibly. If you have the arrl antenna book, see page 7-3, comparing
an inverted v to a flat-top dipole. The flat-top has an oblong
radiation pattern; the inverted v, the pattern is pretty much
circular.

Same thing, page 20.11 of the arrl handbook, which also mentions,
tho', that the inverted v lobes have 8 db gain, less, than the
flat-top.

Sounds like it could be a wash...

bob
k5qwg

>
>Dee D. Flint <deeflint01@comcast.net> wrote in message
>news:FPednf8QE8F32WTd4p2dnA@comcast.com...
>>
>> "Doug Birky" <dgbirky@voyager.net> wrote in message
>> news:10fidrdflcpnnda@corp.supernews.com...
>> > I am new to HF having just passed my General and code tests. I am
>putting
>> up
>> > a dipole the will be running due East/West at about 40ft. I really have
>> no
>> > other options for installation and cannot run it North/South. I am in
>> lower
>> > Michigan. My question is will I be able to make any East Coast contacts
>> > with this? Specifically, I'd like to be able to monitor the W1AW
>> bulletins,
>> > code runs etc. I am interested in contacting the Southern states, but
>> would
>> > like to know if the East will be accessable.
>> >
>> > Thanks in advance,
>> > Doug Birky
>> > KC8YEC/AG
>>
>>
>> It may or may not be accessible. However, you can dramatically improve

>the
>> situation by setting the dipole up as an inverted V. As such, it pretty
>> much becomes omnidirectional.
>>
>> Dee D. Flint, N8UZE
>>
>

490. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 22:50:17 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <i1bjf016n0spa31ve6cksvmvgda77t0hdr@4ax.com>
Source record: 92311

On Sat, 17 Jul 2004 14:26:54 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>J. Harvey wrote:
>>
>> One of my assumptions is that the RHCP and LHCP can operate in
>> complete isolation of each other. . .
>
>Some time ago, I stated that at any point in space there's a single
>field, and that we can split it into various components to suit our
>analytical needs. But the way we choose to split it or, conversely, the
>way it was created (from a single source or polarization, or multiple
>ones) doesn't alter the nature of the field in any way. I'm not sure if
>what I said was simply disbelieved or whether it was ignored -- the end
>result is the same.
>
>The total field you get from simultaneous RHCP and LHCP waves is simple
>to see by using the index finger of each hand to represent the
>instantaneous orientation of the E field from each of two waves. Point
>the index finger of your left hand downward and the index finger of your
>right hand upward, knuckle-to-knuckle, so the fingers make a vertical
>line extending from one fingertip to the other. The left index finger
>will represent the LHCP wave and the right index finger the RHCP wave.
>At the beginning instant that we're illustrating, they're out of phase
>and sum to zero. So the field at that point and that time is zero.
>
>Now rotate your left finger 45 degrees CCW and the right finger 45
>degrees CW, to represent how the fields are oriented 1/8 period later or
>1/8 wavelength away. If you add the two finger "vectors", you find the
>result is a field that's horizontal, pointing to the left, and 1.414
>times the length of one finger. Rotate the fingers another 45 degrees,
>the left finger CCW and the right one CW. Now they're both pointing to
>the left, and the sum is a horizontal field with magnitude equal to 2
>fingers. If you continue this process, you'll find that the sum of the
>two fields is always horizontal, and it oscillates between zero and two
>fingers in instantaneous amplitude. It is, in fact, exactly the same as
>and entirely indistinguishable from a horizontally polarized wave coming
>from, say, a dipole. You can reach the same conclusion mathematically
>from the equations I posted a few weeks ago.
>
>If you run the same experiment beginning with the fingers in phase --
>both pointing upwards -- you'll get a purely vertically polarized wave.
>And with other starting phase angles, you'll get linearly polarized
>waves of other orientations.
>

>No magical energy distruction or disappearing takes place -- it's all
>accounted for. And you can receive it just fine with a dipole.
>
>Roy Lewallen, W7EL

You're absolutely right, Roy, I confess I shot without aiming properly. It's been many years since I worked with CP, and I now remember going through the same exercise that you presented above with the same result, a linearly-polarized wave. Thanks for the refresher course.

Walt, W2DU

491. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 22:52:08 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <7bbjf05l38q0qbli961lovpurkp58kvra8@4ax.com>
Source record: 92312

On Sat, 17 Jul 2004 16:48:38 -0500, Cecil Moore <w5dxp@hotmail.com> wrote:

>Roy Lewallen wrote:
>> If you run the same experiment beginning with the fingers in phase --
>> both pointing upwards -- you'll get a purely vertically polarized wave.
>
>Actually, I got the same two fingers back on the freeway the other day. :-)

Cecil, you're lucky you got two back. I usually only get one.

Walt

492. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 22:54:56 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <37iKc.104594$%_6.83212@attbi_s01>
Source record: 92313

Do you have a proper license to operate the radio?

And, Yes it does have an internal microphone. It should not need any
testing.

Rafael Lopez wrote:

> I just got this radio last night. It's supposed to have a built in
> mic. How can I test the mic? What button do i push?
> I already read the online manuals for it but it doesn't even tell you
> how to do the most simplest things.
>
> http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%20and%20Marine%20Radios&Reuse=N
>
> thanks
>
>

493. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 23:34:40 UTC
From: j999w@aol.com
Message-ID: <20040717193440.05881.00002192@mb-m05.aol.com>
Source record: 92314

Why buy more wire ... don't you have a knife?

jw
K9RZZ

494. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-17 23:50:42 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <djejf0dmpuq5d7ia1bp9s3g75mrs4ahgl9@4ax.com>
Source record: 92315

On 17 Jul 2004 23:34:40 GMT, j999w@aol.com (J999w) wrote:

>Why buy more wire ... don't you have a knife?
>
>jw
>K9RZZ

Yes, got a good knife, but the wire is stranded, and corrosion will
get in between the buried strands. Considering ordering some solid
bare wire.

Of course, corrosion would grow all around solid wire, too... :-(

bob
k5qwg

495. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 00:13:45 UTC
From: "Dee D. Flint" <deeflint01@comcast.net>
Message-ID: <QYidnWugV5UIXWTd4p2dnA@comcast.com>
Source record: 92129
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10fidrdflcpnnda@corp.supernews.com...
> I am new to HF having just passed my General and code tests. I am putting
up
> a dipole the will be running due East/West at about 40ft. I really have
no
> other options for installation and cannot run it North/South. I am in
lower
> Michigan. My question is will I be able to make any East Coast contacts
> with this? Specifically, I'd like to be able to monitor the W1AW
bulletins,
> code runs etc. I am interested in contacting the Southern states, but
would
> like to know if the East will be accessable.
>
> Thanks in advance,
> Doug Birky
> KC8YEC/AG
>
>

In reality, W1AW is strong enough that you should be able to hear it regularly even off the end of the dipole. And when conditions are moderately good, other stations also. Although I would still favor an inverted V for it's more omnidirectional pattern.

Like you, I am also in Michigan and I regularly pick up W1AW no matter what antenna I use. Since I can normally only listen to them at night, I typically listen to them on 40m, 80m or 160m depending on the conditions. I've also picked them up on 20m when I was home and that band was open.

Dee D. Flint, N8UZE

496. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 00:22:06 UTC
From: Warren Bowery <kc8ykq@arrl.net>
Message-ID: <Xns9529CF2C48A16wbowerybrightnet@216.196.97.132>
Source record: 92316

Texas Towers (http://www.texastowers.com)

temp1@cfl.rr.com (Rick) wrote in
news:8986633b.0407141114.5c5a7bbf@posting.google.com:

> Trying to locate a cheap source for Times LMR400-DB coax. Need about
> 100'. Anybody?
>
> IA

497. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 02:23:34 UTC
From: CW <"no adddress"@spam>
Message-ID: <vOidnVi0eZi6QmTd4p2dnA@comcast.com>
Source record: 92317

I can see it know. Cops are chasing some sleaze. He's going at great speed
in traffic, causing a danger to everyone. Cops let loose with their RF gun
disabling sleaze's car, their own and fifteen others on the road. One of the
innocents affected is a 98 pound woman that can't control her car without
the power steering. She looses control causing a multicar pileup. Yep,
sounds safer to me.

"Ian Jackson" <REMOVE-THIS-BIT@g3ohx.demon.co.uk> wrote in message
news:TGSgSaHOtQ9AFwwt@g3ohx.demon.co.uk...
> In message <20040712072951.05741.00001468@mb-m05.aol.com>, Fractenna
> <fractenna@aol.com> writes
> >Also keeps those pesky UFO's in check:-)....
> >
> >Hmmm..I though cars were better shielded than that.
> >Article: http://www.guardian.co.uk/crime/article/0,2763,1259138,00.html
> >
> >73,
> >Chip N1IR
>
> In the UK, we're not supposed to use 'unproved' commercial equipment in
> modern cars (although I think we can still use homebrew). This is
> supposedly to avoid the risk of interfering with the electronics
> (although I can't really think why 'approved' equipment should be
> better). It's all to do with being a part of the European Community, and
> the rule-making bureaucrats in Brussels.
>
> Obviously, the real solution to the problem would be to improve the
> immunity of the car electronics (which costs), but you now have a good
> reason to justify not doing this.
>
> In the UK, we pay a TV licence. There are detector vans which track down
> offenders. The obvious way was to look for the radiation of the local
> oscillator in the tuner. However, a radiating local oscillator is a 'bad
> thing' because it interferes with things. With modern sets, it's
> probably easier to look for the rubbish from the switch-mode power
> supplies (which is often worse when the set is in standby).
>
> It used to be said that the TV manufacturers were actually willing to
> improve their designs in order to reduce the radiation, but were
> pressured not to do so! I'm not sure how true any of this is. I've a
> sneaky feeling that costs again come into it somewhere.
>
> Cheers,
> Ian.

> --
>

498. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 02:35:17 UTC
From: jimp@specsol-spam-sux.com
Message-ID: <cdcnl5$ot9$1@mail.specsol.com>
Source record: 92318

CW <no adddress@spam free.com> wrote:
> I can see it know. Cops are chasing some sleaze. He's going at great speed
> in traffic, causing a danger to everyone. Cops let loose with their RF gun
> disabling sleaze's car, their own and fifteen others on the road. One of the
> innocents affected is a 98 pound woman that can't control her car without
> the power steering. She looses control causing a multicar pileup. Yep,
> sounds safer to me.

Not to mention the guy with the pacemaker that causes yet another pileup
while clutching his chest.

--
Jim Pennino

Remove -spam-sux to reply.

499. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 03:11:49 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <VTlKc.6390$lz2.71@nwrddc03.gnilink.net>
Source record: 92319

"Walter Maxwell" <w2du@iag.net> wrote in message
news:5olif0hk8usnf6b6l1v23ud9kthqjqcck9@4ax.com...
> On Sat, 17 Jul 2004 08:30:08 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk>
> wrote:
>
> >Jerry Martes wrote:
> >> Is there anyone interested in seeing pictures of a home made VHF
slotted
> >>line?? I bought some copper pipe at Home Depot and built a 50 ohm line
> >>that seems to work very well.
> >
> >Definitely! (I'm always a sucker for VHF test equipment.)
> >
> >H-P used to make one of these, in the form of a very deep trough-line
> >with massively braced side castings. There was also a 'lite' copy in the
> >old ARRL VHF Handbook.
> >
> >If you can minimize the residual SWR (the variation in probe readings
> >along the line when terminated in a precision 50R load) and other
> >sources of variability, then you'll be able to make highly accurate
> >vector impedance measurements at VHF.
> Hello, Ian,
> here's a little trivia concerning slotted lines you might find
interesting. I
> developed all the antenna systems that flew on the World's first weather
> satellite, TIROS 1, in late 1957, which flew April 1, 1960. The system
operated
> on four different frequencies, two around 108 MHz and two around 235 MHz.
> Circular polarization was required, and was achieved using four crossed
unipoles
> working against the body of the satellite. Each unipole used a 1/4wl
sleeve for
> the high-frequency portion with a coaxial extension for the lower
frequency,
> decoupled by the sleeve for the higher frequency. The sleeve portion was
was
> developed to yield a 50 + j0 terminal impedance that included the mutual
> impedance of the extended portion. The extension portion was developed to
> provide as low an SWR as possible at the lower frequency. The coupling
system
> for feeding the four radiators with four transmitters simultaneously was
> designed in stripline.
>

> Now, getting to the point of the story, the development of the radiating
> elements was performed before there were any network analyzers--I
performed ALL
> the work using only a slotted line for hundreds and hundreds of
measurements.
> The line was an HP-805, that couldn't cover the frequencies involved, so I
used
> 4:1 scale modeling at 432 and 940 MHz. The radiator development was done
using a
> single element over a ground plane, with the spacecraft modeled with a 4:1
half
> shell mounted on a 4' x 4' aluminum plate for the ground plane.
>
> If you have a copy of Reflections II you can see a picture of my lab setup
at
> the RCA Laboratories in Princeton, NJ, showing the ground plane and the
HP-805
> slotted line. Incidentally, in 1957 there were no hand calculators
either--my
> calculations from the line measurements were all made with a slide rule.
Just
> picture the amount of work involved using such antiquated equipment
compared
> with what we could do now using today's more sophisticated
instrumentation.
>
> Walt Maxwell, W2DU

Walter

I too used a HP slotted line alot when I was developing antennas in the 1950s. I never actually knew exactly what I was doing, and have forgotten most of what I once did with confidance. It is coincidantal that my primary reason for wanting to know the antenna impedance at 137 MHz is because I learned, a few months ago, that weather pictures could be produced from VHF satellite signals.
I reasoned that the pattern form two crossed dipoles spaced 1/4 wave apart and fed in phase could produce a bidirectional pattern with circular polarization. I thought that set of simple dipoles might be easy for me to build, if the antenna concept was compatible with the radiation from polar orbiting satellites, since they travel in a North-South path.

I am aware that the helix antennas are superior to the crossed array I'd like to build. Still, I am having fun learning about how these antennas work.

If I cant easily refine this slotted line, I may try building an impedance meter with the 4 coax lines, 1/8th wave long each. Perhaps the accuracy of the coax impedance meter will provide the accuracy missing from the slotted line method. Maybe the two 'devices' can compliment each other.

I was sure pleased with the way this slotted line worked last night when I fired it up. I am open to any criticism. This is only fun for me. But, since it seems to work so well, I thought there might be some interest in home made "Home Depot" quality (low cost) slotted lines for VHF.

Jerry

500. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 03:30:00 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <t9rjf0pu35qs33kb2uj3b2amfvtndp6hbg@4ax.com>
Source record: 92130
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

On Sat, 17 Jul 2004 09:27:16 -0500, "Doug Birky" <dgbirky@voyager.net>
wrote:

>I am new to HF having just passed my General and code tests. I am putting up
>a dipole the will be running due East/West at about 40ft. I really have no
>other options for installation and cannot run it North/South. I am in lower
>Michigan. My question is will I be able to make any East Coast contacts
>with this? Specifically, I'd like to be able to monitor the W1AW bulletins,
>code runs etc. I am interested in contacting the Southern states, but would
>like to know if the East will be accessable.

First... Congratulations.

You've had quite a few answers, but you didn't say which HF band(s)
you will be using.

It's been my experience on 160 through 40 that a dipole at 30 to 40
feet isn't very directional. As far as the East coast (I'm near
Midland MI) you should be able to work it with a 100 watts at night on
160 and 75. Day and early evenings on 40. The only problem with 40 at
night is the foreign broadcast.

I've worked California on 160 SSB with a dipole at 30 feet.
Not often, but I've done it. I've worked Europe on 160 CW.

No, my current station isn't using any thing at 30 feet except the
bottom of my back up vertical out in the shop, but it doesn't take a
big antenna or power to work 500 to 1000 miles on HF.

Remember too that the characteristics of these bands change quite a
bit throughout the sunspot cycle.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

>
>Thanks in advance,
>Doug Birky
>KC8YEC/AG
>

501. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 04:07:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10fjts4m9cvfq89@corp.supernews.com>
Source record: 92320

Correction:

Roy Lewallen wrote:
> . . .
> Now rotate your left finger 45 degrees CCW and the right finger 45
> degrees CW, to represent how the fields are oriented 1/8 period later or
> 1/8 wavelength away. If you add the two finger "vectors", you find the
> result is a field that's horizontal, pointing to the left, and 1.414
> times the length of one finger. Rotate the fingers another 45 degrees,
> the left finger CCW and the right one CW. Now they're both pointing to
> the left, and the sum is a horizontal field with magnitude equal to 2
> fingers. . . .

My rotation was reversed -- it should read:

> Now rotate your left finger 45 degrees CCW and the right finger 45
> degrees CW, to represent how the fields are oriented 1/8 period later or
> 1/8 wavelength away. If you add the two finger "vectors", you find the
> result is a field that's horizontal, pointing to the *right*, and 1.414
> times the length of one finger. Rotate the fingers another 45 degrees,
> the left finger CCW and the right one CW. Now they're both pointing to
> the *right*, and the sum is a horizontal field with magnitude equal to 2
> fingers. . . .

The conclusion isn't affected by the error.

Roy Lewallen, W7EL

502. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 04:13:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c5tjf0hd38gseth0n62jstpc04gn7pejma@4ax.com>
Source record: 92221

On Sat, 17 Jul 2004 10:30:16 -0500, Bob Miller
<bxmillerNoSpam@texas.net> wrote:

>I'd like to enhance the pipe with a few buried radials. I happen to
>have a 500' roll of 14-guage stranded *insulated* copper wire. Will
>the insulation keep the wire from becoming "one with the dirt"?
>
>Or should I go buy some bare solid copper wire?

Hi Bob,

Insulated will make a poor 60Hz safety ground (which you should
connect this ground to anyway). Insulated wire will make a perfectly
good RF ground (upwards to 5 orders of magnitude frequency shift makes
a considerable difference in what ground "means"). The pipe, on the
other hand, serves very little purpose. It is inadequate for a safety
ground, and useless for RF and maybe just suitable for providing a
mast base. It does give you a physical reference point - kinda like a
big solder lug.

Use up all your wire and enjoy - another 500 or 5000 feet won't bring
as much return as the first 500. For radials, try 10 X 50 feet, or 50
X 10 feet or something in between.

73's
Richard Clark, KB7QHC

503. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 04:59:31 UTC
From: CW <"no adddress"@spam>
Message-ID: <N6mdnfzcvq0pnmfdRVn-vA@comcast.com>
Source record: 92222

I have this radio. The manual is quite complete and gives detailed operating instructions. Your message raises doubts about whether you actually have a license. If not, I suggest you forget abut using that radio. Unlicensed operation carries stiff penalties.

"Rafael Lopez" <rlopez@sanbrunocable.com> wrote in message news:10fj7cql5skbh5e@corp.supernews.com...
> I just got this radio last night. It's supposed to have a built in
> mic. How can I test the mic? What button do i push?
> I already read the online manuals for it but it doesn't even tell you
> how to do the most simplest things.
>
>
http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%20and%20Marine%20Radios&Reuse=N
>
> thanks
>
>

504. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 05:13:19 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10fk1p57q4vk0f9@corp.supernews.com>
Source record: 92131
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Thanks for all the reaponses. I apreciate them.

Let me give a little more info...

Rig is an ICOM IC751, I hava a MFJ-941D antenna tuner, and am contemplating putting up a WINDOM similar to the one described on buxcom.com. I would like to be able to hit the 20 and 40 meter bands. I'm not sure this is feasable, but this is where I'm at.

Thanks,
Doug

Roger Halstead <Delete-Invallid.groups@tm.net> wrote in message news:t9rjf0pu35qs33kb2uj3b2amfvtndp6hbg@4ax.com...
> On Sat, 17 Jul 2004 09:27:16 -0500, "Doug Birky" <dgbirky@voyager.net>
> wrote:
>
> >I am new to HF having just passed my General and code tests. I am putting
up
> >a dipole the will be running due East/West at about 40ft. I really have
no
> >other options for installation and cannot run it North/South. I am in
lower
> >Michigan. My question is will I be able to make any East Coast contacts
> >with this? Specifically, I'd like to be able to monitor the W1AW
bulletins,
> >code runs etc. I am interested in contacting the Southern states, but
would
> >like to know if the East will be accessable.
>
> First... Congratulations.
>
> You've had quite a few answers, but you didn't say which HF band(s)
> you will be using.
>
> It's been my experience on 160 through 40 that a dipole at 30 to 40
> feet isn't very directional. As far as the East coast (I'm near
> Midland MI) you should be able to work it with a 100 watts at night on
> 160 and 75. Day and early evenings on 40. The only problem with 40 at
> night is the foreign broadcast.
>
> I've worked California on 160 SSB with a dipole at 30 feet.
> Not often, but I've done it. I've worked Europe on 160 CW.
>

> No, my current station isn't using any thing at 30 feet except the
> bottom of my back up vertical out in the shop, but it doesn't take a
> big antenna or power to work 500 to 1000 miles on HF.
>
> Remember too that the characteristics of these bands change quite a
> bit throughout the sunspot cycle.
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair)
> www.rogerhalstead.com
>
> >
> >Thanks in advance,
> >Doug Birky
> >KC8YEC/AG
> >
>

505. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 05:19:30 UTC
From: tdonaly@aol.com
Message-ID: <20040718011930.22984.00001865@mb-m07.aol.com>
Source record: 92223

Jim Pennino wrote,
>
>CW <no adddress@spam free.com> wrote:
>> I can see it know. Cops are chasing some sleaze. He's going at great speed
>> in traffic, causing a danger to everyone. Cops let loose with their RF gun
>> disabling sleaze's car, their own and fifteen others on the road. One of
>the
>> innocents affected is a 98 pound woman that can't control her car without
>> the power steering. She looses control causing a multicar pileup. Yep,
>> sounds safer to me.
>
>Not to mention the guy with the pacemaker that causes yet another pileup
>while clutching his chest.
>
>--
>Jim Pennino
>

You guys certainly are a cheerful bunch.
73,
Tom Donaly, KA6RUH

506. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 06:48:16 UTC
From: matt wilson <mwilson2@nospam.bigpond.net.au>
Message-ID: <Q2pKc.5566$K53.3970@news-server.bigpond.net.au>
Source record: 92224
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.shortwave

"Jeff" <jeff_164@hotmail.com> wrote in message
news:8d%Fc.7124$LT3.277012@news.xtra.co.nz...
Hi,
Does anyone remember a weird compact antenna that was featured in a 60's (or
early 70's) edition of "73" magazine. Had 2 etched PCBs (like spaced plates)
mounted inside a plastic bucket, and fed with coax?
Does anyone know more details of this?
JEFF
ZL3TNV

Wouldn't be a patch antenna by any chance?

507. Re: ISOTRON Antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 08:27:25 UTC
From: F8BOE <f8boe-8@bluemail.ch>
Message-ID: <40fa3426$0$15279$636a15ce@news.free.fr>
Source record: 92225

Oh good... If you want to be sure, you should clamp some RFI ferrites on the coaxial cable to see what happens then.
The results may be surprising... But it's worh trying, just to protect your shack's equipment.

73 de F8BOE Olivier ...-.-

"GeorgeF" <av8tor@licensed4funREMOVEBEFOREFLIGHT.com> a ?crit dans le message de news:_G8Kc.507$kb1.148@bignews6.bellsouth.net...
>
>
> F8BOE wrote:
>
> > Hello,
> >
> > Just a simple dumb question: is it the "birdfeeder" that radiates or the
> > coaxial cable used between the transceiver and the miraculous antenna?
> >
> > 73 de F8BOE Olivier ...-.-
> >
>
> I belive its the two metal places, one above and one below the coil
> which are to form a capacitor.
>
> George
>

508. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 10:22:11 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <IMWFOUJT9k+AFAeh@ifwtech.co.uk>
Source record: 92226

Tdonaly wrote:
>Jim Pennino wrote,
>>
>>CW <no adddress@spam free.com> wrote:
>>> I can see it know. Cops are chasing some sleaze. He's going at great speed
>>> in traffic, causing a danger to everyone. Cops let loose with their RF gun
>>> disabling sleaze's car, their own and fifteen others on the road. One of
>>the
>>> innocents affected is a 98 pound woman that can't control her car without
>>> the power steering. She looses control causing a multicar pileup. Yep,
>>> sounds safer to me.
>>
>>Not to mention the guy with the pacemaker that causes yet another pileup
>>while clutching his chest.
>>
>>--
>>Jim Pennino
>>
>
>You guys certainly are a cheerful bunch.

Nah, just practical and realistic.

This is just another "mad scientist" project. Technologically
feasible... well, just maybe... but totally devoid of common sense.

The amazing thing is how easily such projects find powerful backers at
corporate and even governmental level [insert cross-references to the
Dotcom Boom and BPL here].

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

509. 80 Metre mini loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 11:27:27 UTC
From: Michael <Michael-nospam@bigpond.net.au>
Message-ID: <z8tKc.6090$K53.2215@news-server.bigpond.net.au>
Source record: 92227

I recently saw a design for an 80M mini loop that was about 9 feet high and 16 feet long with ribbon feed as the matching capacitor.

Unfortunately I lost the design and can't seem to find it. I am not sure whether it came from the web or from a magazine.

Does anyone know of it?

510. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 12:56:32 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <ijqkf0tnkv8aghc5lhrkae83a5u3mrukcg@4ax.com>
Source record: 92228

On Sun, 18 Jul 2004 04:13:37 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sat, 17 Jul 2004 10:30:16 -0500, Bob Miller
><bxmillerNoSpam@texas.net> wrote:
>
>>I'd like to enhance the pipe with a few buried radials. I happen to
>>have a 500' roll of 14-guage stranded *insulated* copper wire. Will
>>the insulation keep the wire from becoming "one with the dirt"?
>>
>>Or should I go buy some bare solid copper wire?
>
>Hi Bob,
>
>Insulated will make a poor 60Hz safety ground (which you should
>connect this ground to anyway). Insulated wire will make a perfectly
>good RF ground (upwards to 5 orders of magnitude frequency shift makes
>a considerable difference in what ground "means"). The pipe, on the
>other hand, serves very little purpose. It is inadequate for a safety
>ground, and useless for RF and maybe just suitable for providing a
>mast base. It does give you a physical reference point - kinda like a
>big solder lug.
>
>Use up all your wire and enjoy - another 500 or 5000 feet won't bring
>as much return as the first 500. For radials, try 10 X 50 feet, or 50
>X 10 feet or something in between.

Question -- is there a problem in using a safety ground as an rf
ground, too? If I connected 10x50-ft bare, buried radials to my little
pipe, and used it as a safety ground for the station, and also as a
ground to work an inverted "L" against, would that be a problem, or
should I have separate ground points?

Tnx to all who have replied so far...

Bob
k5qwg

>
>73's
>Richard Clark, KB7QHC

511. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 13:43:02 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <Aa-dncCJz9rD42fd4p2dnA@comcast.com>
Source record: 92132
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10fk1p57q4vk0f9@corp.supernews.com...
> Thanks for all the reaponses. I apreciate them.
>
> Let me give a little more info...
>
> Rig is an ICOM IC751, I hava a MFJ-941D antenna tuner, and am
contemplating
> putting up a WINDOM similar to the one described on buxcom.com. I would
> like to be able to hit the 20 and 40 meter bands. I'm not sure this is
> feasable, but this is where I'm at.
>
> Thanks,
> Doug
****
The easiest way to get 20 and 40 m on one antenna, and ditch the tuner at
the same time, is to connect 20 and 40 m dipoles to the same feedpoint. You
just need some separation at the ends of the wire. I have a 17m dipole,
which is also the support for the 40m inverted V. I will try to come up with
some numbers for you.

Tam/WB2TT

512. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 14:31:12 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0407180631.3ce281fb@posting.google.com>
Source record: 92229

"Ed Price" <edprice@cox.net> wrote in message news:<UQeKc.17318$9I.16487@okepread02>...
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:40f83e69$1_3@corp.newsgroups.com...
> > Brian Kelly wrote:
> > > But . . but . . so the cop punches the button, turns loose a monster
> > > burst of RF and the perp's engine sputters out.
> >
> > What prevents the perp from having his own RF gun? Are the cops
> > going to be driving 1960 Pontiacs?
> > --
> > 73, Cecil http://www.qsl.net/w5dxp
>
>
> They should be so lucky! In 60, Pontiac was building a race rep, and a
> friend of mine bought a 3/4 race special factory package Bonneville. It may
> have been heavy, and the front hood looked like the horizon, but you could
> chirp the tires at 80 MPH going into 4th! IIRC, also about 6 MPG. It would
> make one fantastic freeway cruiser.

The trunks of those puppies were the other half of the horizon. A kW
mobile rig in the trunk? No sweat! And with room left over for the
suitcases.

Then along came the Chrysler 300s. The PA State Police bought a flock
of "Police Special" 300s which they used to nail those big GM and
Mopar cruisers. The 300s surfed the PA Turnpike at 130-140 mph "CCS".
I was riding on the TPK in the sedate 1953 six-banger family Pontiac,
didn't see trooper coming, then *Whooosh!*, his pressure wave almost
blew us out of the lane.

w3rv

> Ed
> wb6wsn

513. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 14:36:05 UTC
From: CW <"no adddress"@spam>
Message-ID: <d_CdnUK738lJF2fdRVn-iQ@comcast.com>
Source record: 92230

Unlike some in industry, we just look at the potential problems. To often, things like this get pushed through due to the drive of money rather than common sense. Often this results in the "acceptable loses" attitude when it comes to the safety of the public.
"Tdonaly" <tdonaly@aol.com> wrote in message news:20040718011930.22984.00001865@mb-> You guys certainly are a cheerful bunch.
> 73,
> Tom Donaly, KA6RUH
>
>

514. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 15:44:09 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <dVwKc.8845$gt1.751@nwrddc02.gnilink.net>
Source record: 92231

"Walter Maxwell" <w2du@iag.net> wrote in message
news:4irif09t8eatt50rckbjqa1dg9jm4s0k86@4ax.com...
> On Sat, 17 Jul 2004 18:11:39 -0000, "Dave" <noone@nowhere.com> wrote:
>
> >good idea, they are just another way for lawyers to make money. any new
> >idea gets ripped off as soon as its out anyway with cheap imitations...
and
> >then lawyers make more money suing the infringers if they can get a hand
on
> >them.
> >
> ><kashe@sonic.net> wrote in message
> >news:proif0lb8r0mte1jr4fj4vtaeeb5mpaopc@4ax.com...
> >> On Sat, 17 Jul 2004 12:11:22 -0000, "Dave" <noone@nowhere.com> wrote:
> >>
> >> >
> >> >"J. Harvey" <VE1BLL@rac.ca> wrote in message
> >> >news:8a615218.0407162037.6170399a@posting.google.com...
> >> >
> >> >> Any comments or technical objections?
> >> >>
> >> >if this were that obvious to you, and it would work as described, it
> >would
> >> >already be in wide use.
> >>
> >> So let's save some federal money by shutting down the USPTO.
> >> Everything useful that works has already been thought of, so there's
> >> no need for them any more.
> >>
> >> > i haven't had enough caffeine yet to explain why,
> >> >but somehow i think you would get complete cancellation and there
would
> >be
> >> >no propagation at all.
>
> Without giving the problem any serious mathematical or physical thought,
only
> knee-jerk intuition, IMO, if a radiator suitable for radiating CP of
either hand
> were fed with equal signals leading to both RHCP and LHCP simultaneously,
I
> agree with the poster above that complete cancelation would result, and
there
> would be no radiation.

>
> This is why a linearly-polarized antenna could not receive any energy.
(har har)
>
> Walt, W2DU

Walter

I'm not bright enough to fully understand all this discussion. But, I wonder if the appropriate phasing of two circularly polarized waves, one RHCP and the other LHCP can result in a linearly polarized wave, not zero. I think I could build an antenna from two crossed dipoles spaced 1/4 wave apart that porduce either RHCP or LHCP radiation depending on how *one* of the dipoles is phased with respect to the other. Feed them in phase and get RHCP. Change the phase of either dipole 180 degrees and get LHCP. The "unchanged" dipole in both cases has the same polarization and phase.

If (theoretically) two of these antennas were superimposed on each other, only the phase of *one* dipole of each antenna needs to be 'reversed' to produce the 'reversed' (RH or LH) polarized wave. The other dipole of each antenna can be in phase with each other, so the sum is a linear wave.

What am I missing??

Jerry

515. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 17:11:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b0blf01df03muau7rr64m5a6ujgtc4bou1@4ax.com>
Source record: 92232

On Sun, 18 Jul 2004 07:56:32 -0500, Bob Miller
<bxmillerNoSpam@texas.net> wrote:
>Question -- is there a problem in using a safety ground as an rf
>ground, too? If I connected 10x50-ft bare, buried radials to my little
>pipe, and used it as a safety ground for the station, and also as a
>ground to work an inverted "L" against, would that be a problem, or
>should I have separate ground points?

Hi Bob,

The Safety ground as RF ground will be ONE radial equal in path to all copper it is connected to (your plumbing in other words, provided it is not plastic) - not bad, but not any great shakes. It was never designed nor installed to serve RF, just to keep 60Hz tamed around home, shop and garden.

You can build a separate Safety ground into your antenna ground system, but code demands you then connect both Safety grounds (to keep you, children, small animals, and your neighbors alive - this is not just a tedious bureaucratic exercise). The wire between them must be continuous (no splices). This also has the added advantage of cutting down on nasty noise problems called "ground loops" (the hum that refuses to go away or the strange operation of other electronics while you are transmitting).

73's
Richard Clark, KB7QHC

516. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 17:23:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40fab335_1@corp.newsgroups.com>
Source record: 92133
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Bill Turner wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote:
>>Make the "dipole" multiple wavelengths long. The major lobes will move
>>toward the ends of the "dipole". (I say "dipole" because it is then
>>actually electrically a polypole.)
>
> Doesn't the word dipole just mean there are two halves of opposite
> polarity? How do you figure "polypole" just because of multiple
> wavelengths?

A *physical* dipole is two halves of opposite polarity.
An *electrical* dipole has two major radiation lobes. A multi-
wavelength physical dipole has more than two major radiation
lobes and is therefore not electrically a "dipole". It's
splitting hairs but I try to differentiate between the two
meanings by including the proper adjective.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

517. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 17:32:12 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <L5ydnfZTysiAKWfdRVn-jA@adelphia.com>
Source record: 92233

CW wrote:

> Unlike some in industry, we just look at the potential problems. To often,
> things like this get pushed through due to the drive of money rather than
> common sense. Often this results in the "acceptable loses" attitude when it
> comes to the safety of the public.

Gotta disagree here CW

The reason that this sort of thing is going on is that they are trying to lower those losses. The zapper may or may not be a practical device (I tend to think of it as quite impractical for most of the reasons already outlined) but it was brought about with the intention of *saving* lives. "Acceptable losses" hover very near zero, perp or innocent bystander. Otherwise a chase could be terminated very, very quickly.

- Mike -

518. T2FD

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 17:33:21 UTC
From: RADIOSERVICE 39 <radioservice39@poczta.onet.pl>
Message-ID: <cdec8t$c8a$1@news.onet.pl>
Source record: 92234

Hi 4 all,
just thinking about building a t2fd antenna myself
has anybody detailed info about balun constructing?
dimensions...?
maybe any experience?

rgds 4 all
Chris
sp7wme[AT]wp.pl

519. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 17:59:40 UTC
From: fractenna@aol.com
Message-ID: <20040718135940.04966.00001228@mb-m24.aol.com>
Source record: 92235

>I was riding on the TPK in the sedate 1953 six-banger family Pontiac,
>didn't see trooper coming, then *Whooosh!*, his pressure wave almost
>blew us out of the lane.
>
>w3rv
>

Suf's up:-)!

520. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 18:43:23 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <9nglf0het8ji0lldja795ufkfge8rcrd0t@4ax.com>
Source record: 92236

On Sun, 18 Jul 2004 15:44:09 GMT, "Jerry Martes" <j.jmartes@verizon.net> wrote:

>> Without giving the problem any serious mathematical or physical thought,
>only
>> knee-jerk intuition, IMO, if a radiator suitable for radiating CP of
>either hand
>> were fed with equal signals leading to both RHCP and LHCP simultaneously,
>I
>> agree with the poster above that complete cancelation would result, and
>there
>> would be no radiation.
>>
>> This is why a linearly-polarized antenna could not receive any energy.
>(har har)
>>
>> Walt, W2DU
>
> Walter
>
> I'm not bright enough to fully understand all this discussion. But, I
>wonder if the appropriate phasing of two circularly polarized waves, one
>RHCP and the other LHCP can result in a linearly polarized wave, not zero.
>I think I could build an antenna from two crossed dipoles spaced 1/4 wave
>apart that porduce either RHCP or LHCP radiation depending on how *one* of
>the dipoles is phased with respect to the other. Feed them in phase and get
>RHCP. Change the phase of either dipole 180 degrees and get LHCP. The
>"unchanged" dipole in both cases has the same polarization and phase.
>
> If (theoretically) two of these antennas were superimposed on each other,
>only the phase of *one* dipole of each antenna needs to be 'reversed' to
>produce the 'reversed' (RH or LH) polarized wave. The other dipole of each
>antenna can be in phase with each other, so the sum is a linear wave.
>
> What am I missing??
>
> Jerry
>

Well, Jerry, your last statements is correct. Apparently you missed Roy's post, where he explained that two equal harmonically related RHCP and LHCP signals reduce to a linearly-polarized wave. I was out of my tree when I came up with the knee-jerk response of no signal. I knew better, but I spoke without having my brain in motion. Happens too often when one gets to my age.

Walt

521. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 18:58:06 UTC
From: Dave <noone@nowhere.com>
Message-ID: <-5GdnQdv6NfZVWfdRVn-sA@crocker.com>
Source record: 92134
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:40fab335_1@corp.newsgroups.com...
> Bill Turner wrote:
> > Cecil Moore <w5dxp@hotmail.com> wrote:
> >>Make the "dipole" multiple wavelengths long. The major lobes will move
> >>toward the ends of the "dipole". (I say "dipole" because it is then
> >>actually electrically a polypole.)
> >
> > Doesn't the word dipole just mean there are two halves of opposite
> > polarity? How do you figure "polypole" just because of multiple
> > wavelengths?
>
> A *physical* dipole is two halves of opposite polarity.
> An *electrical* dipole has two major radiation lobes. A multi-
> wavelength physical dipole has more than two major radiation
> lobes and is therefore not electrically a "dipole". It's
> splitting hairs but I try to differentiate between the two
> meanings by including the proper adjective.

don't worry about cecil, he just loves splitting hairs and using adjectives
that no one else would even think of applying. just give him a few more
messages and he'll be spouting on about some kind of reflection polymatrix
in his polypole or some such stuff... all when all the originator of the
thread wanted to know is if his dipole would work.

YES! it will work, stop reading this drivel and get on the air!

522. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 19:09:59 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <r_udnTyt5PSdVmfdRVn-sA@comcast.com>
Source record: 92135
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Doug,
I put some numbers into EZNEC, and came up with:

20 meter support dipole, 34.1 feet long at 40 feet.

40 meter inverted V hanging from 20 meter dipole, 66.7 feet total length,
with ends drooping down at 30 degrees.

SWR is less than 2:1 from 14.0 - 14.4, and 7.0 - 7.4.

Directivity is about 6db on 40m and 13 db on 20m. I think there would be
some advantage to not having the antennas in the same plane.

Tam/WB2TT

523. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 19:15:12 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <e7hlf053acabb56mrme1negfququbamet2@4ax.com>
Source record: 92237

> Walter
>
> I too used a HP slotted line alot when I was developing antennas in the
>1950s. I never actually knew exactly what I was doing, and have forgotten
>most of what I once did with confidance. It is coincidantal that my
>primary reason for wanting to know the antenna impedance at 137 MHz is
>because I learned, a few months ago, that weather pictures could be produced
>from VHF satellite signals.
> I reasoned that the pattern form two crossed dipoles spaced 1/4 wave apart
>and fed in phase could produce a bidirectional pattern with circular
>polarization. I thought that set of simple dipoles might be easy for me to
>build, if the antenna concept was compatible with the radiation from polar
>orbiting satellites, since they travel in a North-South path.
>
> I am aware that the helix antennas are superior to the crossed array I'd
>like to build. Still, I am having fun learning about how these antennas
>work.
>
> If I cant easily refine this slotted line, I may try building an impedance
>meter with the 4 coax lines, 1/8th wave long each. Perhaps the accuracy of
>the coax impedance meter will provide the accuracy missing from the slotted
>line method. Maybe the two 'devices' can compliment each other.
>
> I was sure pleased with the way this slotted line worked last night when I
>fired it up. I am open to any criticism. This is only fun for me. But,
>since it seems to work so well, I thought there might be some interest in
>home made "Home Depot" quality (low cost) slotted lines for VHF.
>
> Jerry
>
Hi Jerry,

I hink it's great that you can buy materials a Home Depot from which you can fabricate a slotted line having 50-ohm impedance. With smooth inner and outer conductors the inherent swr should be low enough for making acceptable measurements. In addition, if the teflon spacers are thin they should give only an insignificant discontinuity at 137 MHz.

You might still want to consider the quadrifilar helix. They are being used nearly exclusively for all frequencies on the NOAA polar-orbiting weather satellites. While at RCA in 1976 I performed an R&D project on the quad helix by investigating the radiation patterns and impedances on over 1000 different configuations. From the data obtained from my measurements, one configuration fit the requirements for the TIROS-N spacecrafts, which became NOAA spacecraft once in polar orbit. RCA built the entire series of TIROS spacecraft until RCA

was taken over by GE in 1986.

The report of my R&D investigation appears in Reflections II, and is also available for downloading from my web page at http://home.iag.net/~w2du. There is also a chapter in Reflections 1 and 2 that describes two configurations of the quad helix, one of which is that flying on the NOAA satellites;. The chapter number is 22, and is also available for downloading from my web page. That chapter gives the data for constructing the configuration flying on the NOAA satellites, which uses an infinite balun and self phasing of the helical elements. If you're not interested in constructing that particular configuration you can still feed the two helical elementss separately, using commercially made baluns and a 90ï¿½ phase shifter.

Jerry, the beautiful aspect of using the quad helix is that you don't have to point it toward the satellite. Just place it so the beam is vertical and at least 1/4wl above ground and it'll give you signal from horizon to horizon without aiming it.

Good luck with whatever configuration you use.

Walt

524. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 19:18:02 UTC
From: kashe@sonic.net
Message-ID: <s3jlf0d36pu464v452j0pb4rvkeos7fmmt@4ax.com>
Source record: 92238

On Sat, 17 Jul 2004 12:23:50 -0700, "Ed Price" <edprice@cox.net>
wrote:

>
>"Brian Kelly" <kelly@dvol.com> wrote in message
>news:d22b54c3.0407160546.33df12d1@posting.google.com...
>
>SNIP
>
>>
>> But . . but . . so the cop punches the button, turns loose a monster
>> burst of RF and the perp's engine sputters out. What prevents the RF
>> from also shutting down the engine in the Looney Van? The cops will be
>> issued Looney Vans equipped with RF-proof 1956 Stromberg carburetors
>> or what?? That would thrill the EPA and the EU envirofreaks no end . .
>
>
>Maybe you haven't noticed it, but government regularly exempts itself from
>the picky regulations that they impose on the general populace.
>
>It's not the carb that's the RF sensitive element, it's the Engine Control
>Computer which the zappers attempt to toast. That means that the ideal
>immune vehicle would be about pre-1980, with a Kettering ignition system.
>However, the 70's cars were notorious for trying to reduce exhaust emissions
>with pneumatics, thermal delays, and other non-electronic systems. Those
>systems created balky, stall-prone engines, so we need to move the date back
>to about 1970.

I guess the next step will be to require big yellow stickers
on the sun visors warning owners with pacemakers to stop immediately
if redlighted so as not to have the pacemaker smoked.

525. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 19:20:47 UTC
From: kashe@sonic.net
Message-ID: <iajlf0l4eojsdgeepfklskqsvilvqgddf2@4ax.com>
Source record: 92239

On Sat, 17 Jul 2004 19:23:34 -0700, "CW" <no adddress@spam free.com>
wrote:

>I can see it know. Cops are chasing some sleaze. He's going at great speed
>in traffic, causing a danger to everyone. Cops let loose with their RF gun
>disabling sleaze's car, their own and fifteen others on the road. One of the
>innocents affected is a 98 pound woman that can't control her car without
>the power steering. She looses control causing a multicar pileup. Yep,
>sounds safer to me.

You have electronic power steering? When did they give up on
the vacuum/hydraulic systems?

526. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 19:22:35 UTC
From: kashe@sonic.net
Message-ID: <2djlf09jl36dcp5fog7carnqc2pfcpgq6j@4ax.com>
Source record: 92240

On 18 Jul 2004 05:19:30 GMT, tdonaly@aol.com (Tdonaly) wrote:

>Jim Pennino wrote,
>>
>>CW <no adddress@spam free.com> wrote:
>>> I can see it know. Cops are chasing some sleaze. He's going at great speed
>>> in traffic, causing a danger to everyone. Cops let loose with their RF gun
>>> disabling sleaze's car, their own and fifteen others on the road. One of
>>the
>>> innocents affected is a 98 pound woman that can't control her car without
>>> the power steering. She looses control causing a multicar pileup. Yep,
>>> sounds safer to me.
>>
>>Not to mention the guy with the pacemaker that causes yet another pileup
>>while clutching his chest.

Hey, wait a minute -- we forgot to mention Parkinson's
patients with DBS electrodes in their brains and all the associated
electronics. :-)

527. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 20:31:21 UTC
From: CW <"no adddress"@spam>
Message-ID: <l9CdnTJyNqaFQ2fdRVn-uQ@comcast.com>
Source record: 92241

Before I explain this, I'm going to give you a chance to think about what
you just said. Becoming any clearer?

<kashe@sonic.net> wrote in message
news:iajlf0l4eojsdgeepfklskqsvilvqgddf2@4ax.com...
>>
> You have electronic power steering? When did they give up on
> the vacuum/hydraulic systems?
>

528. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 20:52:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10flooi52f40g17@corp.supernews.com>
Source record: 92242

Over the years I've seen quite a bit of this kind of thing. In my experience, it's not the brain child of a "mad scientist" at all, but a clever entrepreneur. He makes the idea sound plausible enough to get technically naive investors (which can easily include the government) to chip in, makes himself president and CEO of a company, and lives the good life as long as he can before the investors finally realize there won't be buckets of money at the end of the road and pull the plug. Although not required, quite a few of the ones I've known have a Ph.D., which impresses the investors. Some leave a trail of crashed companies behind them but manage to do it over and over, conning a new set of marks each time.

It doesn't take a very careful look at some of the "miracle" antenna proponents to identify a number of these operations at work right now.

Roy Lewallen, W7EL

Ian White, G3SEK wrote:
>
> Nah, just practical and realistic.
>
> This is just another "mad scientist" project. Technologically
> feasible... well, just maybe... but totally devoid of common sense.
>
> The amazing thing is how easily such projects find powerful backers at
> corporate and even governmental level [insert cross-references to the
> Dotcom Boom and BPL here].
>
>

529. J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 22:58:28 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <ogDKc.139245$wH4.7415098@twister.southeast.rr.com>
Source record: 92243

I am planning on building a 15 meter and possibly a 20 meter vertical J antenna. Plans are for the bottom of the jay to be a position adjustable strap. Below the strap the two pieces will be connected together by short lengths of pipe welded to the vertival members. Tunning will be acomplished by movimg the shorting strap and telescoping the long side. Will the shorts below the strap have any significant electrical effects.

Jimmie

530. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 23:05:33 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <1nDKc.12469$584.11248@newssvr25.news.prodigy.com>
Source record: 92244

Well, be that as it may (and granted, didnt keep vehicle from resttarting), as two way tech for railroad, had complaint , and from MECHANICS about their TRUCK! Said when talked on radio, it would come to screeching halt, if they used their two way radio (160 mhz)! would key radio in front of the shop- no problem, thought they NUTS! Said, "Lets take for a test drive" And sure as all get out, ENGINE STALLED! what was interesting was that no problem when first installed the radio (*&$%*() truck then was around 20 years old, and that about 15 years ago)! Turns out that they replaced the old POINTS- Coil, Distributor with an Electronic ignition kit! Refitted it to the original, and no further probs (no info on what kind of caps to get rid of the rf for the original from the manufacturer !) -- But Roy is right-- after all, Couple fellow's (Gates and Allen) are college DROPOUTS, and they worth more bux than lotsa Ph D. s - combined! Only one PERSONALLY would trust (Ph D) is a fellow named T.J.Rodgers - founder of Cypress Semiconductors! Most of the the others are exactly what Roy describes !! Jim NN7K

Roy Lewallen wrote:
> Over the years I've seen quite a bit of this kind of thing. In my
> experience, it's not the brain child of a "mad scientist" at all, but a
> clever entrepreneur. He makes the idea sound plausible enough to get
> technically naive investors (which can easily include the government) to
> chip in, makes himself president and CEO of a company, and lives the
> good life as long as he can before the investors finally realize there
> won't be buckets of money at the end of the road and pull the plug.
> Although not required, quite a few of the ones I've known have a Ph.D.,
> which impresses the investors. Some leave a trail of crashed companies
> behind them but manage to do it over and over, conning a new set of
> marks each time.
>
> It doesn't take a very careful look at some of the "miracle" antenna
> proponents to identify a number of these operations at work right now.
>
> Roy Lewallen, W7EL

531. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-18 23:19:34 UTC
From: VE1BLL@rac.ca
Message-ID: <8a615218.0407181519.5569a37e@posting.google.com>
Source record: 92245

Roy Lewallen
> ...
> And you can receive it just
> fine with a dipole.

Thanks Roy.

It now makes perfect sense to me that since CP can be generated with two linear antennas (crossed dipoles, phased appropriately), it must be true that one could make linear using two CP antennas - just as you reminded us.

Still - I have a nagging feeling that, taking advantage of the -3dB separation between CP and linear, there must be at least a small (3dB SNR) Shannon window in there that might be used to squeeze through some extra data. Likely not (yet) cost effective even it it does exist.

I appreciate all the responses.

Now - what shall I do with the $10,000 that I didn't spend on a patent ?

;-)

532. Re: J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 00:42:31 UTC
From: AK2F <ak2f@verizon.net>
Message-ID: <XNEKc.10417$W86.1439@nwrdny03.gnilink.net>
Source record: 92246

Jimmie:

Should work fine. I've built 10 meter J poles with similar technique. Make a "trombone" at the bottom of the antenna for impedance matching. electrically, the long vertical section is an "end fed half wave vertical" with a "quarter wave matching stub" formed by the J section and bottom of long part. You can make the radiator longer or shorter than a half wave and still match it.

73,
Woody AK2F

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:ogDKc.139245$wH4.7415098@twister.southeast.rr.com...
> I am planning on building a 15 meter and possibly a 20 meter vertical J
> antenna. Plans are for the bottom of the jay to be a position adjustable
> strap. Below the strap the two pieces will be connected together by short
> lengths of pipe welded to the vertival members. Tunning will be
acomplished
> by movimg the shorting strap and telescoping the long side. Will the
shorts
> below the strap have any significant electrical effects.
>
> Jimmie
>
>

533. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 02:01:43 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <6YFKc.2439$a64.735@bignews5.bellsouth.net>
Source record: 92247

Reminds me of the cartoon of the lineman whose job changed to running underground service - he said the hardest part was getting the holes deep enough to bury the power poles.
You got a lot of good advice already - I vote for bare copper - and use the ground rod and its ground clamp as a solderless lug to distribute the buried ground wires.

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message news:amgif0dptot85r367e2sj0ebo74s4fjhkv@4ax.com...
> I can't find this in any of my books, so thought I ask the group:
>
> For my general station ground, I have a copper pipe that goes down
> about one foot -- then hits rock or limestone or whatever.
>
> I'd like to enhance the pipe with a few buried radials. I happen to
> have a 500' roll of 14-guage stranded *insulated* copper wire. Will
> the insulation keep the wire from becoming "one with the dirt"?
>
> Or should I go buy some bare solid copper wire?
>
> Tnx,
>
> Bob
> k5qwg
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004

534. Re: T2FD

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 03:27:14 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2004.07.19.03.30.44.392484@spam.spam>
Source record: 92248

On Sun, 18 Jul 2004 12:30:42 -0700, wrote:

> See http://www.cebik.com/t2fd.html
>

Something really really wrong with there results. Does not jive with other postings. Also, how does a pattern get so asymmetrical from such a symmetrical antenna?

535. Re: T2FD

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 03:35:22 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <_jHKc.13430$lz2.9226@nwrddc03.gnilink.net>
Source record: 92249

"yea right" <spam@spam.spam> wrote in message
news:pan.2004.07.19.03.30.44.392484@spam.spam...
> On Sun, 18 Jul 2004 12:30:42 -0700, wrote:
>
> > See http://www.cebik.com/t2fd.html
> >
>
> Something really really wrong with there results. Does not jive with other
> postings. Also, how does a pattern get so asymmetrical from such a
> symmetrical antenna?

I see nothing surprising on LB's site.
The patterns are elevation patterns. The asymmetry results from the tilting
in the vertical plane.

Dale W4OP

536. direct TV ant and ham radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 03:49:29 UTC
From: pdrunen@aol.com
Message-ID: <20040718234929.00126.00000073@mb-m10.aol.com>
Source record: 92250

Hi Group,

Can anyone tell me what gain I could expect on 70cm and 905MHz and higher amateur bands using a 19 inch direct TV ant disk?

Is the LNA in the dish convertable to something close to any amateur bands?

Tnx de KJ4UO

537. fm not receiving

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 03:57:22 UTC
From: Patt <pattj@shaw.ca>
Message-ID: <CEHKc.57929$ek5.48381@pd7tw2no>
Source record: 92251

Someone gave me an older stereo receiver, which is a Nikko 6065. The am plays fine, however the fm does not play at all. There is a black plastic tube on the back of the set, but moving that does not help. There are some antenna screws at the back of the set but no wires on them. Could you help me. Thanks.
Patt.

538. Re: fm not receiving

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 04:25:42 UTC
From: Howard <mensch90249>
Message-ID: <heimf0t909t1mi31qt2s3t2q1pkcuejpn2@4ax.com>
Source record: 92252

On Mon, 19 Jul 2004 03:57:22 GMT, "Patt" <pattj@shaw.ca> wrote:

>Someone gave me an older stereo receiver, which is a Nikko 6065. The am
>plays fine, however the fm does not play at all. There is a black plastic
>tube on the back of the set, but moving that does not help. There are some
>antenna screws at the back of the set but no wires on them. Could you help
>me. Thanks.
>Patt.
>
The black plastic tube is the AM antenna, they often swivel around a
bit so you can adjust it's position for best reception. Sounds like
there is no FM antenna. You can buy an FM antenna easily, what you
are looking for is made of 300 ohm twinlead and is a dipole (actually
what is called a folded dipole) and can be found at Radio Shack,
sometimes at Target or Lowe's and I've even seen them at the 99-cent
store. The Radio Shack part number is 42-2385 and will set you back
about $5 (depending on your sales tax). Connect the antenna to the
screw terminals & hopefully that will solve the problem.

If you have extra speaker cable laying around I suggest you take about
6 or 7 feet of it and separate the wires on one end for about inches
then strip about 1/2 inch of insulation and connect one lead to each
screw terminal: at the other end separate the wires for about 38 - 40
inches and tack or tape them to the wall. You are looking for the
finished product to look like a 'T' with top being about 4-1/2 feet or
so. I've found little difference in performance between the homebrew
dipole antenna I've described and the commerical dipole and if you
have the wire laying around it lets you know fast and cheap if lack of
antenna is what the problem is.

Good luck,
Howard

539. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 04:39:49 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <pgIKc.994$ac1.879@nwrddc04.gnilink.net>
Source record: 92253

"Walter Maxwell" <w2du@iag.net> wrote in message
news:<e7hlf053acabb56mrme1negfququbamet2@4ax.com>...

>

> > Walter

> >

> > I too used a HP slotted line alot when I was developing antennas in the

> >1950s. I never actually knew exactly what I was doing, and have forgotten

> >most of what I once did with confidence. It is coincidental that my

> >primary reason for wanting to know the antenna impedance at 137 MHz is

> >because I learned, a few months ago, that weather pictures could be
produced

> >from VHF satellite signals.

> > I reasoned that the pattern form two crossed dipoles spaced 1/4 wave
apart

> >and fed in phase could produce a bidirectional pattern with circular

> >polarization. I thought that set of simple dipoles might be easy for me
to

> >build, if the antenna concept was compatible with the radiation from
polar

> >orbiting satellites, since they travel in a North-South path.

> >

> > I am aware that the helix antennas are superior to the crossed array I'd

> >like to build. Still, I am having fun learning about how these antennas

> >work.

> >

> > If I cant easily refine this slotted line, I may try building an
impedance

> >meter with the 4 coax lines, 1/8th wave long each. Perhaps the accuracy
of

> >the coax impedance meter will provide the accuracy missing from the slotted

> >line method. Maybe the two 'devices' can compliment each other.

> >

> > I was sure pleased with the way this slotted line worked last night when I

> >fired it up. I am open to any criticism. This is only fun for me. But,

> >since it seems to work so well, I thought there might be some interest in

> >home made "Home Depot" quality (low cost) slotted lines for VHF.

> >

> > Jerry

> >

> Hi Jerry,

>

> I hank it's great that you can buy materials a Home Depot from which you can

> fabricate a slotted line having 50-ohm impedance. With smooth inner and outer

> conductors the inherent swr should be low enough for making acceptable

> measurements. In addition, if the Teflon spacers are thin they should give only

> an insignificant discontinuity at 137 MHz.

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> nearly exclusively for all frequencies on the NOAA polar-orbiting weather

> satellites. While at RCA in 1976 I performed an R&D project on the quad helix by

> investigating the radiation patterns and impedances on over 1000 different

> configurations. From the data obtained from my measurements, one configuration

> fit the requirements for the TIROS-N spacecrafts, which became NOAA spacecraft

> once in polar orbit. RCA built the entire series of TIROS spacecraft until RCA

> was taken over by GE in 1986.

>

> The report of my R&D investigation appears in Reflections II, and is also

> available for downloading from my web page at http://home.iag.net/~w2du. There

> is also a chapter in Reflections 1 and 2 that describes two configurations of

> the quad helix, one of which is that flying on the NOAA satellites;. The chapter

> number is 22, and is also available for downloading from my web page. That

> chapter gives the data for constructing the configuration flying on the NOAA

> satellites, which uses an infinite balun and self phasing of the helical

> elements. If you're not interested in constructing that particular configuration

> you can still feed the two helical elements separately, using commercially made

> baluns and a 90&#65533; phase shifter.

>

> Jerry, the beautiful aspect of using the quad helix is that you don't have to

> point it toward the satellite. Just place it so the beam is vertical and at

> least 1/4wl above ground and it'll give you signal from horizon to horizon

> without aiming it.

>

> Good luck with whatever configuration you use.

>

> Walt

>

Walter

I found pre-cut to 5 foot length two copper pipes at Home Depot. The large diameter pipe is 2.00 ID and the smaller is 0.875 OD. I made some ID and OD tapers about 3 inches long so they matched some N connectors. I dont actually know why I measure a reflection of 1/10 th of the incident voltage.

I must have been too sloppy with the construction somewhere. Still, I wasnt at all sure I could build something that would work so I wasnt sure how careful I'd have to be. I can probably learn where most of the discontinuities are. But, I can do everything I need to do with this "quick and dirty" slotted line.

As for the Helix for NOAA satellite reception, I agree that the helix is the best way to go for polar orbiting satellite pictures. I had heard alot of tales of difficulties about building QHAs and QFHs. I have a home made QHA that works pretty well. I dont understand how they work. But I like the way the work.

Right now I'm having fun trying to build a collapaable/foldable antenna for VHF polar orbiting weather satellite reception. The building of an antenna is the major reason for me being interested in WXSAT. I sure couldnt improve on the omni azimuth reception of a helix. But, what do you think about there being some worth in a crossed dipole that is oriented to look along the North-South? It is fairly easy/cheap to build and quite tolerant to errors in dipole element length.

I am sure that you are vastly more knowledgeable about the radiation pattern and coverage of the Cross than I am. It seems to provide good signals toward North and South with good RHCP within about 90 degrees both North and South, without "aiming". I oriented the antenna so its nulls are East and West at low angles. I reasoned that satellites traversing those low angle toward the East or West would be viewable for only minimal times when only polar orbiting satellites are considered. I tried orienting the antenna so the null occurred at zenith, so the East-West sensitivity would improve, but I cant fill the overhead nulls.

I'm getting carried away with a discussion that probably interests no one.

Jerry

540. Re: J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 07:57:01 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.19.07.57.00.941993@127.0.0.1>
Source record: 92254

On Sun, 18 Jul 2004 22:58:28 +0000, Jimmie wrote:

> I am planning on building a 15 meter and possibly a 20 meter vertical J
> antenna. Plans are for the bottom of the jay to be a position adjustable
> strap. Below the strap the two pieces will be connected together by short
> lengths of pipe welded to the vertival members. Tunning will be acomplished
> by movimg the shorting strap and telescoping the long side. Will the shorts
> below the strap have any significant electrical effects.
>
> Jimmie

I built one for 10 out of 1/2 inch copper pipe. admittedly, this isn't the
best material (pipe is too flimsy for high wind conditions without bracing).

I would suggest you check the following site for building a J antenna:

http://www.cebik.com/jp1.html

that site has an entire treatus on how to build one from scratch
(including formulas).

I would, at the very least, recommend 1.5" or 2" copper pipe for the
J-portion, followed by 1" pipe for the next section and completed by .5"
pipe for the last section (all parts are available at home depot for
minimal cost).

Be aware thopugh, the increased diameter of the lower sections will have a
very large effect on where your best match will ocurr..

DE N7ZZT
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

541. Re: direct TV ant and ham radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 09:10:09 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <RdMKc.93794$RH7.72366@newssvr29.news.prodigy.com>
Source record: 92255

Short , simple answer : FORGET IT ! TVRO dish, the 6-8 foot variety,
sort of work, at 1296 (13 centimeters), but even they not much good
below that frequency. Ill leave it to your immagination just how much
LOSS one of those 18 inch (foot and 1/2) dishes would have at 432 !! Jim
NN7K

PDRUNEN wrote:
> Hi Group,
>
> Can anyone tell me what gain I could expect on 70cm and 905MHz and higher
> amateur bands using a 19 inch direct TV ant disk?
>
> Is the LNA in the dish convertable to something close to any amateur bands?
>
> Tnx de KJ4UO

542. Re: direct TV ant and ham radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 09:18:09 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <lIMKc.93795$bJ7.39350@newssvr29.news.prodigy.com>
Source record: 92256

Oh, and b.t.w., these 18 inchers, work at around 18 GHz , some 11-13 times the frequencies you wish to operate at- nearest band to it is 22 GHz band, but doubtful you could retune it to work! Jim

Jim - NN7K wrote:

> Short , simple answer : FORGET IT ! TVRO dish, the 6-8 foot variety,
> sort of work, at 1296 (13 centimeters), but even they not much good
> below that frequency. Ill leave it to your immagination just how much
> LOSS one of those 18 inch (foot and 1/2) dishes would have at 432 !! Jim
> NN7K
>
> PDRUNEN wrote:
>
>> Hi Group,
>>
>> Can anyone tell me what gain I could expect on 70cm and 905MHz and higher
>> amateur bands using a 19 inch direct TV ant disk?
>>
>> Is the LNA in the dish convertable to something close to any amateur
>> bands?
>>
>> Tnx de KJ4UO

543. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 09:50:44 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0407190150.47bcae3e@posting.google.com>
Source record: 92257

fractenna@aol.com (Fractenna) wrote in message
news:<20040718135940.04966.00001228@mb-m24.aol.com>...
> >I was riding on the TPK in the sedate 1953 six-banger family Pontiac,
> >didn't see trooper coming, then *Whooosh!*, his pressure wave almost
> >blew us out of the lane.
> >
> >w3rv
> >
>
> Suf's up:-)!

Yeah, 'cept those suckers were not "Little Deuce Coupe" surfers . .

w3rv

544. Re: News: 'Hi Tech Zapper to Stop Car Chases'

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 13:28:09 UTC
From: Vito <vito@crosslink.net>
Message-ID: <40fbcc6b$0$6535@dingus.crosslink.net>
Source record: 92258

"Ed Price" <edprice@cox.net> wrote
> However, the 70's cars were notorious for trying to reduce exhaust
emissions
> with pneumatics, thermal delays, and other non-electronic systems. Those
> systems created balky, stall-prone engines, so we need to move the date
back
> to about 1970.

Second that! My 66 Fairlane with a 289 V8 got 17-21MPG. My 68
factory-special GTO would just lift the left front tire off the ground
coming off the line, and charge past 120MPH, but got 12 MPG. My buddy's
1972 340 Duster was slower than the Fairlane and barely got 12 MPG. The 72
made less nitrious oxide than the goat, which was good for LA smog, but made
more half-burned hydrocarbons that the rest of the country didn't need.

545. Re: fm not receiving

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 13:28:52 UTC
From: 'Doc <ltdoc@yahoo.com>
Message-ID: <tP2dnf9Mzb0IUWbdRVn-jA@cwis.net>
Source record: 92259

Patt,
Now you know why they 'gave' it to you, huh? Before spending
any money on an antenna, try attaching ~any~ length of wire to the
antenna terminals. Hear anything across the FM band? If not,
then the problem is probably in the receiver and not the lack of an
antenna. Do you think the receiver is worth repairing?
'Doc

546. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 13:43:34 UTC
From: Allen Windhorn <Allen.Windhorn@LSUSA.com>
Message-ID: <ullhgi01c.fsf@LSUSA.com>
Source record: 92260

Walter Maxwell <w2du@iag.net> writes:
> <snip>
>
> Probably so, I still have a few 8" disks lying around, just so I can
> show and tell my great grandchildren (and I have five) what the
> early days of computers were using for memory.
>
> I'm going to scan the pic in Reflections and email it to you in JPEG
> format.
>
> Walt, W2DU

You had 8" floppies? Let me tell you, when I was young we didn't have any such newfangled nonsense. No, sir, we thought ourselves lucky to have punch cards. AND we punched them by hand -- none of these fancy keypunch machines for us (grumble, grumble).

I still do have a box of punch cards somewhere, containing:

1. A simulator written in 3600 Compass assembler, for a hypothetical machine we had to design. (The 3600 assembly was itself run on an emulator running on a CDC 6600.)
2. An assembler we wrote for our hypothetical processor.
3. A program written in our hypothetical assembly language, to be assembled by our assembler and run on our emulated processor. I don't remember what it did, probably sieve of Eratosthenes or something.

I'm not sure if the cards are in order any more though :-)

Regards,
Allen
--
Allen Windhorn (507) 345-2782 FAX (507) 345-2805
Kato Engineering (Though I do not speak for Kato)
P.O. Box 8447, N. Mankato, MN 56002
Allen.Windhorn@LSUSA.com

547. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 14:36:30 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <rmmnf0d8l35aemerf4tm15is9bgpjim3tb@4ax.com>
Source record: 92261

On Mon, 19 Jul 2004 13:43:34 GMT, Allen Windhorn <Allen.Windhorn@LSUSA.com>
wrote:

>Walter Maxwell <w2du@iag.net> writes:
>> <snip>
>>
>> Probably so, I still have a few 8" disks lying around, just so I can
>> show and tell my great grandchildren (and I have five) what the
>> early days of computers were using for memory.
>>
>> I'm going to scan the pic in Reflections and email it to you in JPEG
>> format.
>>
>> Walt, W2DU
>
>You had 8" floppies? Let me tell you, when I was young we didn't have
>any such newfangled nonsense. No, sir, we thought ourselves lucky to
>have punch cards. AND we punched them by hand -- none of these fancy
>keypunch machines for us (grumble, grumble).
>
>I still do have a box of punch cards somewhere, containing:
>
>1. A simulator written in 3600 Compass assembler, for a hypothetical
> machine we had to design. (The 3600 assembly was itself run on an
> emulator running on a CDC 6600.)
>2. An assembler we wrote for our hypothetical processor.
>3. A program written in our hypothetical assembly language, to be
> assembled by our assembler and run on our emulated processor. I
> don't remember what it did, probably sieve of Eratosthenes or
> something.
>
>I'm not sure if the cards are in order any more though :-)
>
>Regards,
>Allen

Hi Allen,

When I mentioned the 8" disks I was referring to my own personal computer era.
While working at RCA in the early 70s I had others write the programs I needed,
and they punched the cards for me, so I was there then also, but not the extent
you were. Thus you were way ahead of me in computer use.

Walt

548. Re: Stealthy 'dual-CP' emissions (more TV channels)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 15:12:23 UTC
From: richardharrison@webtv.net
Message-ID: <28646-40FBE4D7-344@storefull-3252.bay.webtv.net>
Source record: 92262

J. Harvey wrote:
"Thanks Roy. It now makes perfect sense to me that CP can be generated with two linear antennas (crossed dipoles, phased appropriately), it must be true that one could make linear using two CP antennas - just as you reminded us."

That`s true according to J.D. Kraus, inventor of the helical antenna. On page 477 of his 1950 book "Antennas":
"Elliptical Polarization as Produced by Two Circularly Polarized Waves - When the amplitudes are equal, the resultant wave is linearly polarized (Fig.15-28a)."

Best regards, Richard Harrison, KB5WZI

549. Re: 5 foot long (VHF) slotted line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 15:46:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40fbedf1_7@corp.newsgroups.com>
Source record: 92263

Walter Maxwell wrote:
> When I mentioned the 8" disks I was referring to my own personal computer era.
> While working at RCA in the early 70s I had others write the programs I needed,
> and they punched the cards for me, so I was there then also, but not the extent
> you were. Thus you were way ahead of me in computer use.

Wrote and punched my first computer program in BELL on punched cards for an
IBM-650. The computer filled, as I remember, with dual triodes, was huge,
but the air-conditioning to keep it cool was bigger. The only permanent
memory was a magnetic drum, used for program and data. (Remember head crashes?)
It used the bi-quinary number system (like an abacus?).

Remember when there was a tube checker in every grocery store?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

550. Alternative to BPL?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 17:10:08 UTC
From: Alan <alannc44@{nospam}ix.netcom.com>
Message-ID: <QfTKc.168985$tH1.6624436@twister.southeast.rr.com>
Source record: 92264

http://www.usatoday.com/money/industries/technology/2004-07-14-wireless_x.ht
m

Alan
WN4HOG

--
Windsurfing Club: http://www.ibscc.org

551. Wunderantenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 17:34:47 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <40FC0637.3090301@psu.edu>
Source record: 92265

Hey, whatever happened to that great antenna coming out of the
University of Rhode Island. You know the one that was invented either by
a technician or some Ph.D.. (the story got changed somewhere along the
line)

- Mike KB3EIA -

552. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 18:05:44 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Y3UKc.3770$Qv4.1766@lakeread03>
Source record: 92266

"Bob Miller" <bxmillerNoSpam@texas.net> wrote

For my general station ground, I have a copper pipe that goes down
about one foot -- then hits rock or limestone or whatever.

I'd like to enhance the pipe with a few buried radials. I happen to
have a 500' roll of 14-guage stranded *insulated* copper wire. Will
the insulation keep the wire from becoming "one with the dirt"?

Or should I go buy some bare solid copper wire?
---
and then Bob added:

Question -- is there a problem in using a safety ground as an rf
ground, too? If I connected 10x50-ft bare, buried radials to my little
pipe, and used it as a safety ground for the station, and also as a
ground to work an inverted "L" against, would that be a problem, or
should I have separate ground points?
--

Hi Bob, can you be more clear on what you meant by "general station ground"?

Since you're in thunderstorm country it could be you mean a lightning
protection ground. But you also mention safety ground and RF ground so it
appears you have multiple requirements here.

Conductor choices vary according to the function of the system so it is
difficult to generalize about stranded v. solid wire until you can be more
specific in your requirements. In some cases neither kind of wire is
appropriate, with wide/heavy gage copper strap being the best choice.

However many purposes your ground system fulfills, and from however many
places it connects to ground rods, one standard always applies: you must
always bond all of your earth-references (ground rods) to your station
equipment AND the main entrance ground of utility wires coming into your
home. Preferably that station single point ground and the Utility single
point ground are the same place. Unfortunately few of us are so lucky as to
be able to locate our station right at the main Utility service entrance.
When the two are far apart that creates problems. With a lot of help from
this group, and professional engineer review, I completed a station
grounding and lightning protection system that accounted for those problems.
The complete site construction plans are listed at:
http://members.cox.net/pc-usa/station/grounding.htm

Hope this helps,

Jack Painter
Virginia Beach, VA

553. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 19:33:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <hmVKc.3805$Qv4.3366@lakeread03>
Source record: 92268

"Bob Miller" <bxmillerNoSpam@texas.net> wrote

For my general station ground, I have a copper pipe that goes down
about one foot -- then hits rock or limestone or whatever.

I'd like to enhance the pipe with a few buried radials. I happen to
have a 500' roll of 14-guage stranded *insulated* copper wire. Will
the insulation keep the wire from becoming "one with the dirt"?

Or should I go buy some bare solid copper wire?
---
and then Bob added:

Question -- is there a problem in using a safety ground as an rf
ground, too? If I connected 10x50-ft bare, buried radials to my little
pipe, and used it as a safety ground for the station, and also as a
ground to work an inverted "L" against, would that be a problem, or
should I have separate ground points?
--

Hi Bob, can you be more clear on what you meant by "general station ground"?

Since you're in thunderstorm country it could be you mean a lightning
protection ground. But you also mention safety ground and RF ground so it
appears you have multiple requirements here.

Conductor choices vary according to the function of the system so it is
difficult to generalize about stranded v. solid wire until you can be more
specific in your requirements. In some cases neither kind of wire is
appropriate, with wide/heavy gage copper strap being the best choice.

However many purposes your ground system fulfills, and from however many
places it connects to ground rods, one standard always applies: you must
always bond all of your earth-references (ground rods) to your station
equipment AND the main entrance ground of utility wires coming into your
home. Preferably that station single point ground and the Utility single
point ground are the same place. Unfortunately few of us are so lucky as to
be able to locate our station right at the main Utility service entrance.
When the two are far apart that creates problems. With a lot of help from
this group, and professional engineer review, I completed a station
grounding and lightning protection system that accounted for those problems.
The complete site construction plans are listed at:
http://members.cox.net/pc-usa/station/grounding.htm

Hope this helps,

Jack Painter
Virginia Beach, VA

554. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 20:18:17 UTC
From: Yodar <yodar@cfl.rr.com>
Message-ID: <d0WKc.73682$uK.52999@twister.tampabay.rr.com>
Source record: 92269

Rick wrote:
> Trying to locate a cheap source for Times LMR400-DB coax. Need about 100'. Anybody?
>
> IA
fair radio dot com ?

skycraftsurplus.com (direct e-mail inquiry will ne necessary, their
inventory is too vast and variable

yodar

555. cushcraft R7

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 20:20:59 UTC
From: DAVID BROWNE <david.browne7@ntlworld.com>
Message-ID: <L2WKc.1811$9d4.480@newsfe5-win.ntli.net>
Source record: 92267

hi can any one give me the measurements for each section, as the web site
pdf file is not clear
thanks david browne

david.browne5@btinternet.com

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.721 / Virus Database: 477 - Release Date: 16/07/2004

556. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 20:26:32 UTC
From: richardharrison@webtv.net
Message-ID: <6413-40FC2E78-426@storefull-3253.bay.webtv.net>
Source record: 92121

Bob, K5QWG wrote:
"Or should I go buy some bare solid copper wire?"

Depends on frequency. As a path for electricity, the earth is like a leaky capacitor or a good capacitor in parallel with a resistance.

Terman says on page 807 of his 1955 edition:
"At broadcast (550-1600 KHz) and lower frequencies the ratio of capacitive reactance of the earth to the earth resitivity (sigma reciprocal=1/conductivity) is considerably greater than unity, so to a first approximation the earth can be considered as purely resistive.----Conversely at frequencies of the order of 10 MHz and greater, the impedance represented by ground (not sea water) is primarily capacitive, and ground-wave attenuation at a given physical distance is determined by the factor of frequency divided by the dielectric constant plus 1."

So for low frequencies use bare wire. For high frequencies, you won`t notice insulation on your radials, electrically.

Best regards, Richard Harrison, KB5WZI

557. Re: cushcraft R7

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 20:26:57 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <40FC2E91.509F0C69@shaw.ca>
Source record: 92270

DAVID BROWNE wrote:
>
> hi can any one give me the measurements for each section, as the web site
> pdf file is not clear
> thanks david browne
>
> david.browne5@btinternet.com
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.721 / Virus Database: 477 - Release Date: 16/07/2004

As Per PDF File (I set mine the same way and it worked well)
distance A=123", B=10-5/8", C=6", D=16", E=16" and F has three settings,
CW=28", Center of band=22", Phone=17-1/8".

Irv VE6BP

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

558. Re: Alternative to BPL?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 22:33:49 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cdhicl$d1m$1@newshost.mot.com>
Source record: 92124

"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
news:QfTKc.168985$tH1.6624436@twister.southeast.rr.com...

>
http://www.usatoday.com/money/industries/technology/2004-07-14-wireless_x.ht
> m
>
>
> Alan
> WN4HOG

Broken link!

--
Steve N, K,9;d, c. i My email has no u's.

559. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 22:41:07 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <76YKc.165057$2o2.9242508@twister.southeast.rr.com>
Source record: 92122

"Rafael Lopez" <rlopez@sanbrunocable.com> wrote in message
news:10fj7cql5skbh5e@corp.supernews.com...
> I just got this radio last night. It's supposed to have a built in
> mic. How can I test the mic? What button do i push?
> I already read the online manuals for it but it doesn't even tell you
> how to do the most simplest things.
>
>
http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%20and%20Marine%20Radios&Reuse=N
>
> thanks
>
>
Manual for this radio is very good but it is not a troubleshooting guide.
What did you say your call was .

560. Re: Buried ground wire, insulated or bare?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 22:42:39 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <z7YKc.3816$Qv4.2354@lakeread03>
Source record: 92123

"Bob Miller" <bxmillerNoSpam@texas.net> wrote

For my general station ground, I have a copper pipe that goes down
about one foot -- then hits rock or limestone or whatever.

I'd like to enhance the pipe with a few buried radials. I happen to
have a 500' roll of 14-guage stranded *insulated* copper wire. Will
the insulation keep the wire from becoming "one with the dirt"?

Or should I go buy some bare solid copper wire?
---
and then Bob added:

Question -- is there a problem in using a safety ground as an rf
ground, too? If I connected 10x50-ft bare, buried radials to my little
pipe, and used it as a safety ground for the station, and also as a
ground to work an inverted "L" against, would that be a problem, or
should I have separate ground points?
--

Hi Bob, can you be more clear on what you meant by "general station ground"?

Since you're in thunderstorm country it could be you mean a lightning
protection ground. But you also mention safety ground and RF ground so it
appears you have multiple requirements here.

Conductor choices vary according to the function of the system so it is
difficult to generalize about stranded v. solid wire until you can be more
specific in your requirements. In some cases neither kind of wire is
appropriate, with wide/heavy gage copper strap being the best choice.

However many purposes your ground system fulfills, and from however many
places it connects to ground rods, one standard always applies: you must
always bond all of your earth-references (ground rods) to your station
equipment AND the main entrance ground of utility wires coming into your
home. Preferably that station single point ground and the Utility single
point ground are the same place. Unfortunately few of us are so lucky as to
be able to locate our station right at the main Utility service entrance.
When the two are far apart that creates problems. With a lot of help from
this group, and professional engineer review, I completed a station
grounding and lightning protection system that accounted for those problems.
The complete site construction plans are listed at:
http://members.cox.net/pc-usa/station/grounding.htm

Hope this helps,

Jack Painter
Virginia Beach, VA

> On Sun, 18 Jul 2004 04:13:37 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
> >
> >Insulated will make a poor 60Hz safety ground (which you should
> >connect this ground to anyway). Insulated wire will make a perfectly
> >good RF ground (upwards to 5 orders of magnitude frequency shift makes
> >a considerable difference in what ground "means"). The pipe, on the
> >other hand, serves very little purpose. It is inadequate for a safety
> >ground, and useless for RF and maybe just suitable for providing a
> >mast base. It does give you a physical reference point - kinda like a
> >big solder lug.
> >
> >Use up all your wire and enjoy - another 500 or 5000 feet won't bring
> >as much return as the first 500. For radials, try 10 X 50 feet, or 50
> >X 10 feet or something in between.
> >73's
> >Richard Clark, KB7QHC

561. Re: Alternative to BPL?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 23:40:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7nmof0dtopjbf6rjda3r8hsh5l2ogtlm6k@4ax.com>
Source record: 92125

On Mon, 19 Jul 2004 17:33:49 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>
>"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
>news:QfTKc.168985$tH1.6624436@twister.southeast.rr.com...
>
>
>>
>http://www.usatoday.com/money/industries/technology/2004-07-14-wireless_x.ht
>> m
>>
>>
>> Alan
>> WN4HOG
>
>Broken link!

Stick the hangin "m" on the end of the line.

Craig McCaw's participation should be a bellweather for this industry.
It should be noted that this initiative is fighting the big guns of
the Power consortium (read Texas) and the FCC as their chum (read
Republican Guard).

73's
Richard Clark, KB7QHC

562. apologies for repeating posts, cannot see them

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-19 23:52:18 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <S8ZKc.3823$Qv4.13@lakeread03>
Source record: 92126

My server will not download the reply I made to this post. Ater new posts appeared and mine did not, I resent (twice). I understand they all did post, and I apologize for resending what was already there. If anyone knows what setting could be casuing them to be invisible (to me) I would appreciate learning how to fix it. Even deleting the entire group and downloading all headers and message bodies did not show my posts in this thread.

Best regards, and maybe someone could reply to this invisible-to-me post, LOL.

Jack

563. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 01:31:52 UTC
From: j999w@aol.com
Message-ID: <20040719213152.04176.00001260@mb-m26.aol.com>
Source record: 92127

Sounds like a dummy load, although I did work a friend 3 miles away with a 6 inch wire end loaded with a soda can on 80 m once ...

jw
k9rzz

564. Re: LMR 400 sources ....

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 01:32:25 UTC
From: j999w@aol.com
Message-ID: <20040719213225.04176.00001261@mb-m26.aol.com>
Source record: 92128

AES has it ... cheap for me since they are in town.

jw
k9rzz

565. Re: apologies for repeating posts, cannot see them

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 02:52:09 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <d42pf05qssg8gi0ra6a17dvc0bpc9dkrmi@4ax.com>
Source record: 92136

On Mon, 19 Jul 2004 19:52:18 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>My server will not download the reply I made to this post. Ater new posts
>appeared and mine did not, I resent (twice). I understand they all did post,
>and I apologize for resending what was already there. If anyone knows what
>setting could be casuing them to be invisible (to me) I would appreciate
>learning how to fix it. Even deleting the entire group and downloading all
>headers and message bodies did not show my posts in this thread.
>
>Best regards, and maybe someone could reply to this invisible-to-me post,
>LOL.
>
>Jack
>

All your posts showed up this afternoon/evening (Monday). Been looking
at your website on grounding. Very informative.

thanks,

bob
k5qwg

566. Re: direct TV ant and ham radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 04:44:42 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <_q1Lc.26$Kv4.14@newssvr13.news.prodigy.com>
Source record: 92137

The DIRECTV and Dish Network antennas receive in the 11 to 12GHZ range
and someone (very) clever could probably mod the LNB for 10GHz amateur
use. These 18" reflectors start getting useful at about 2.4GHZ on up,
below that I would agree with Jim.
Mike

Jim - NN7K wrote:
> Oh, and b.t.w., these 18 inchers, work at around 18 GHz , some 11-13
> times the frequencies you wish to operate at- nearest band to it is 22
> GHz band, but doubtful you could retune it to work! Jim
>
> Jim - NN7K wrote:
>
>> Short , simple answer : FORGET IT ! TVRO dish, the 6-8 foot variety,
>> sort of work, at 1296 (13 centimeters), but even they not much good
>> below that frequency. Ill leave it to your immagination just how much
>> LOSS one of those 18 inch (foot and 1/2) dishes would have at 432 !!
>> Jim NN7K
>>
>> PDRUNEN wrote:
>>
>>> Hi Group,
>>>
>>> Can anyone tell me what gain I could expect on 70cm and 905MHz and
>>> higher
>>> amateur bands using a 19 inch direct TV ant disk?
>>>
>>> Is the LNA in the dish convertable to something close to any amateur
>>> bands?
>>>
>>> Tnx de KJ4UO

567. Re: Wunderantenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 05:06:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <sL1Lc.3881$Qv4.3360@lakeread03>
Source record: 92138

"Mike Coslo" <mjc5remove@psu.edu> wrote
> Hey, whatever happened to that great antenna coming out of the
> University of Rhode Island. You know the one that was invented either by
> a technician or some Ph.D.. (the story got changed somewhere along the
> line)
> - Mike KB3EIA -

The last we heard, the antenna and it's Father had been nominated for the Nobel Peace Prize, and were currently touring in Africa, where the antenna was being investigated for it's potential use in curing aids and feeding the hungry. It's a shame, but we may never see this wunderantenna stateside again. It will probably be cannonized by it's Italian EH brothers and only available through special internet offers. If we're lucky.

Jack

568. dual cb antenna is it worth the trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 06:57:14 UTC
From: jcooper874@webtv.net
Message-ID: <4346-40FCC24A-409@storefull-3274.bay.webtv.net>
Source record: 92139

will two cb antennas make a big difference my friend is going to
put two mobile antennas on his truck i told him it will more
trouble than it is worth. because to set the swr will be a pain
thanks and 73s

http://community.webtv.net/jcooper874/doc
click here
http://community.webtv.net/jcooper874/haveagreatday

http://community.webtv.net/jcooper874/doc0

569. Re: Wunderantenna--Vincent DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 11:26:22 UTC
From: fractenna@aol.com
Message-ID: <20040720072622.25491.00002103@mb-m29.aol.com>
Source record: 92140

>
>"Mike Coslo" <mjc5remove@psu.edu> wrote
>> Hey, whatever happened to that great antenna coming out of the
>> University of Rhode Island. You know the one that was invented either by
>> a technician or some Ph.D.. (the story got changed somewhere along the
>> line)
>> - Mike KB3EIA -
>
>The last we heard, the antenna and it's Father had been nominated for the
>Nobel Peace Prize, and were currently touring in Africa, where the antenna
>was being investigated for it's potential use in curing aids and feeding the
>hungry. It's a shame, but we may never see this wunderantenna stateside
>again. It will probably be cannonized by it's Italian EH brothers and only
>available through special internet offers. If we're lucky.
>
>Jack
>

Mr. Vincent appears, based on his public statements, to be planning a roll out coinciding with the August ARRL New England Boxboro convention (August 14 I believe). I could provide a link, but I just checked it and it is down.

Just so it is known accurately, there is(are) no patent(s) on Mr. Vincent's antennas.

I suspect he will have some high quality data to show --I am not convinced, based upon his public comments, that he has become sufficiently aware of the state of the art of monopoles, nor that he is fully schooled in the prior art of distributed loading. This is my opinion. Of course, he may have sought such knowledge since 4 June, which would be most admirable.

For example, one of the principle themes in his comments is that 'my designs require a fraction of the loading of conventional monopoles'. One thus is led to believe--again, my opinion- that the reactance has disappeared in some way. In fact, if you compare with mid-loaded designs of straight short monopoles, there is less of a coil load--but this is only for THAT coil: he has used a helix, instead of a straight wire, upon which to place that loading coil. There is STILL AS MUCH IF NOT MORE loading with such a design; its just not forced onto a single coil. THERE IS STILL OHMIC LOSS in such designs--it hasn't gone away. Ohmic loss means a departure from 'high efficiency'. I suspect he has no data on efficiency, but has tried to infer it instead. It would be refreshing to see that this is not the case.

He also claims 'wide and excellent bandwidth'. In fact, better bandwith is an intrinsic property of mid-section coil loading, as shown by R.C.Hansen many years ago, and well known to many monopole designers. However, the 'excellent

and wide' bandwidth is only a few percent at best: this is NOT a monopole that works over decades of frequency, nor even many different ham bands in a controlled way.

There are many past examples of Mr. Vincent's comments that indicate, in my opinion, that what he has is not novel. Again: my opinion. This is from someone who is skilled in the art.

After the roll-out, if Mr. Vincent has not been able to come up the learning curve sufficiently, I will publicly disclose additional factual corrections and comments regarding the DLM antenna, and prior art. Of course, this is not a reflection of Mr. Vincent nor his efforts, but a friendly and technical insight into what's possible and a glimpse of what's already been done.

In defense of Mr. Vincent, I am strongly of the opinion that what he has done is not 'snake oil', and it is deleterious to ham radio for some to be so verbal and public in this characterization. However, the question is whether the technology does something new and in some novel way. That is a valid question to ask and I suspect will be answered, over time, in the negative--again, my opinion.

73, Chip N1IR

570. Re: dual cb antenna is it worth the trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 12:37:23 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <e9KdncVFsL6Zj2DdRVn-hA@cwis.net>
Source record: 92141

jc,
Your right, they're more trouble than they're worth,
and most of the claims for them are pure myth.
'Doc

571. Re: dual cb antenna is it worth the trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 14:19:53 UTC
From: Vito <vito@crosslink.net>
Message-ID: <40fd2a0a$0$7073@dingus.crosslink.net>
Source record: 92142

That depends on a bunch of factors you didn't mention. A 1/4 wave CB antenna is about 11 feet long IIRC. More important, it needs a ground plane with the same radius. Most perforce shorten the antenna using coils, at the expense of efficiency and pattern shape, and get by without an optimum ground plane but both transmission and reception suffer - how much depends on the vehicle, the antenna(s) and where you mount it/them. A pair of antenna may yield a pattern favoring the road ahead and behind depending on seperation. That's why big rigs use them. I had a cross-bed tool box with one 6' "Firestick" mounted in it's center that worked as well or better than anthing else I tried.

Of course 2 meters is the better solution.

<jcooper874@webtv.net> wrote in message
news:4346-40FCC24A-409@storefull-3274.bay.webtv.net...
> will two cb antennas make a big difference

572. Re: J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 14:44:06 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <WcaLc.181763$2o2.9364981@twister.southeast.rr.com>
Source record: 92143

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:ogDKc.139245$wH4.7415098@twister.southeast.rr.com...
> I am planning on building a 15 meter and possibly a 20 meter vertical J
> antenna. Plans are for the bottom of the jay to be a position adjustable
> strap. Below the strap the two pieces will be connected together by short
> lengths of pipe welded to the vertival members. Tunning will be
acomplished
> by movimg the shorting strap and telescoping the long side. Will the
shorts
> below the strap have any significant electrical effects.
>
> Jimmie
>
>
Just got through building a 10 M version of a J. Think a 20M version will be
a lot longer than I had invisioned. While I knew the numbers before I
started, the reality of how big it would be did not sink in until
construction of the 10M antenna. I still want the 20 M vertical. Obviously
some redesign is in order. Possibly I will constuct the J out of feedline
and run it horizontally to the shack.

573. Re: apologies for repeating posts, cannot see them

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 14:50:42 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <40FD3142.3080103@myrealbox.com>
Source record: 92144

Jack Painter wrote:
> My server will not download the reply I made to this post. Ater new posts
> appeared and mine did not, I resent (twice). I understand they all did post,
> and I apologize for resending what was already there. If anyone knows what
> setting could be casuing them to be invisible (to me) I would appreciate
> learning how to fix it. Even deleting the entire group and downloading all
> headers and message bodies did not show my posts in this thread.
>
> Best regards, and maybe someone could reply to this invisible-to-me post,
> LOL.
>
> Jack

Everything depends on your news server. When you post a message it is cued for posting with all the other current postings. Depending on how busy the server is, it may not be able to process new postings until it expires a bunch of old ones, to make space. Then it processes latest postings and sends it's information off to other servers for posting. The other servers have the same thing to deal with. If they are busy they may even refuse a packet of postings and your server would have to try again later.

My news server is somewhat local to me and I see my postings within a few seconds of posting. But there are some news servers where I won't be able to see my post show up for 6 or 7 hours. Google groups is like this.

I just take it on faith that my posting got out. Even when I see it on my news server, I have no idea when it will reach any of the other servers.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

574. Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 15:12:46 UTC
From: sjbeyers@trianglenet.net
Message-ID: <72befaab.0407200712.64b92d38@posting.google.com>
Source record: 92145

I remember reading somewhere that one way to determine the optimum number of buried radials for a vertical antenna is to use a specific value for the distance between the outer ends. (I'm not sure if this is the straight-line distance, or the length of a chord, but there wouldn't be much difference.) But I can't remember the value. Something like .05 wavelength rings a bell, but I'm not sure. Does anyone know what the value is and where I might have read it?

Thanks -

Steve W9HJW

575. Re: dual cb antenna is it worth the trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:00:40 UTC
From: - XC - <nobody@home.net>
Message-ID: <GYidncrh6P813GDdRVn-vg@comcast.com>
Source record: 92146

That's what I always thought, but according to one of the links you provided
http://www.signalengineering.com/ultimate/mobile_antennas.html
it's done to even out the skew in the omnidirectional pattern caused by the
asymmetric vehicle ground plane.
For the 18-wheelers with side mirror mounted antennas it might also help to
eliminate the shielding effect of the large trailer body if only one antenna
was used.

A real simple measurement would be to walk a circle around the truck with a
field strength meter and see what you've got.

But for anything else than an 18 wheeler I think it'd be a total waste. But
then again with CBers it's not just about how you sound but about how you
look !

John

<jcooper874@webtv.net> wrote in message
news:4346-40FCC24A-409@storefull-3274.bay.webtv.net...
> will two cb antennas make a big difference my friend is going to
> put two mobile antennas on his truck i told him it will more
> trouble than it is worth. because to set the swr will be a pain
> thanks and 73s
>
> http://community.webtv.net/jcooper874/doc
> click here
> http://community.webtv.net/jcooper874/haveagreatday
>
> http://community.webtv.net/jcooper874/doc0
>

576. W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:11:59 UTC
From: Bob Dixon <dixon.8@osu.edu>
Message-ID: <dixon.8-83E6D4.12115920072004@charm.magnus.acs.ohio-state.edu>
Source record: 92147

John Kraus W8JK has passed away at age 94. He is the inventor of the corner reflector, helix and W8JK antennas.

Bob W8ERD

577. Re: J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:21:35 UTC
From: wa8ulx@aol.com
Message-ID: <20040720122135.16791.00001479@mb-m20.aol.com>
Source record: 92148

>Just got through building a 10 M version of a J. Think a 20M version will be
>a lot longer than I had invisioned. While I knew the numbers before I
>started, the reality of how big it would be did not sink in until
>construction of the 10M antenna. I still want the 20 M vertical. Obviously
>some redesign is in order. Possibly I will constuct the J out of feedline
>and run it horizontally to the shack.

I have done both, a 10 and 15 METER, The best way to get rid othe weight is
to use a 102 inch CB whip for the TOP Section

578. Re: Wunderantenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:39:16 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <40FD4AB4.6010108@psu.edu>
Source record: 92149

Jack Painter wrote:
> "Mike Coslo" <mjc5remove@psu.edu> wrote
>
>>Hey, whatever happened to that great antenna coming out of the
>>University of Rhode Island. You know the one that was invented either by
>> a technician or some Ph.D.. (the story got changed somewhere along the
>>line)
>>- Mike KB3EIA -
>
>
> The last we heard, the antenna and it's Father had been nominated for the
> Nobel Peace Prize, and were currently touring in Africa, where the antenna
> was being investigated for it's potential use in curing aids and feeding the
> hungry. It's a shame, but we may never see this wunderantenna stateside
> again. It will probably be cannonized by it's Italian EH brothers and only
> available through special internet offers. If we're lucky.

Exactly as I thought! ;^)

- Mike KB3EIA -

579. Re: Wunderantenna--Vincent DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:49:04 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <40FD4D00.5090808@psu.edu>
Source record: 92150

Fractenna wrote:
>>"Mike Coslo" <mjc5remove@psu.edu> wrote
>>
>>>Hey, whatever happened to that great antenna coming out of the
>>>University of Rhode Island. You know the one that was invented either by
>>> a technician or some Ph.D.. (the story got changed somewhere along the
>>>line)
>>>- Mike KB3EIA -
>>
>>The last we heard, the antenna and it's Father had been nominated for the
>>Nobel Peace Prize, and were currently touring in Africa, where the antenna
>>was being investigated for it's potential use in curing aids and feeding the
>>hungry. It's a shame, but we may never see this wunderantenna stateside
>>again. It will probably be cannonized by it's Italian EH brothers and only
>>available through special internet offers. If we're lucky.
>>
>>Jack
>>
>
>
> Mr. Vincent appears, based on his public statements, to be planning a roll out
> coinciding with the August ARRL New England Boxboro convention (August 14 I
> believe). I could provide a link, but I just checked it and it is down.
>
> Just so it is known accurately, there is(are) no patent(s) on Mr. Vincent's
> antennas.
>
> I suspect he will have some high quality data to show --I am not convinced,
> based upon his public comments, that he has become sufficiently aware of the
> state of the art of monopoles, nor that he is fully schooled in the prior art
> of distributed loading. This is my opinion. Of course, he may have sought such
> knowledge since 4 June, which would be most admirable.
>
> For example, one of the principle themes in his comments is that 'my designs
> require a fraction of the loading of conventional monopoles'. One thus is led
> to believe--again, my opinion- that the reactance has disappeared in some way.
> In fact, if you compare with mid-loaded designs of straight short monopoles,
> there is less of a coil load--but this is only for THAT coil: he has used a
> helix, instead of a straight wire, upon which to place that loading coil. There
> is STILL AS MUCH IF NOT MORE loading with such a design; its just not forced
> onto a single coil. THERE IS STILL OHMIC LOSS in such designs--it hasn't gone
> away. Ohmic loss means a departure from 'high efficiency'. I suspect he has no
> data on efficiency, but has tried to infer it instead. It would be refreshing
> to see that this is not the case.

>
> He also claims 'wide and excellent bandwidth'. In fact, better bandwith is an
> intrinsic property of mid-section coil loading, as shown by R.C.Hansen many
> years ago, and well known to many monopole designers. However, the 'excellent
> and wide' bandwidth is only a few percent at best: this is NOT a monopole that
> works over decades of frequency, nor even many different ham bands in a
> controlled way.
>
> There are many past examples of Mr. Vincent's comments that indicate, in my
> opinion, that what he has is not novel. Again: my opinion. This is from someone
> who is skilled in the art.
>
> After the roll-out, if Mr. Vincent has not been able to come up the learning
> curve sufficiently, I will publicly disclose additional factual corrections and
> comments regarding the DLM antenna, and prior art. Of course, this is not a
> reflection of Mr. Vincent nor his efforts, but a friendly and technical insight
> into what's possible and a glimpse of what's already been done.
>
> In defense of Mr. Vincent, I am strongly of the opinion that what he has done
> is not 'snake oil', and it is deleterious to ham radio for some to be so verbal
> and public in this characterization. However, the question is whether the
> technology does something new and in some novel way. That is a valid question
> to ask and I suspect will be answered, over time, in the negative--again, my
> opinion.

Thanks for the in-depth answer, Chip. I'll be waiting for the
convention. This and your other post a while back gives me an idea of
what to expect. Perhaps the antenna does indeed work in it's fashion,
and is the victim of the "hype machine". It will be interesting to see
how closely it resembles what was described in your earlier post.

- Mike KB3EIA -

580. Variable diameter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:57:42 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <40FD4F06.6030100@psu.edu>
Source record: 92151

Reading through the 20 meter J-Pole thread got me to thinking.

<<<<possible idiot question alert!>>>>

If a person was to design an antenna that had variable diameters, such as a telescoping pole, or a thin whip antenna on top of a thicker pipe as talked about in the J Pole, what effect would this have on the BW of the antenna. Of course, (I think) it would be less than if the entire antenna was made of one thick length. But I could be way off here. And would it be calculable?

And could variable diameter be of practical use in antenna design?

- Mike KB3EIA -

581. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 16:58:22 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <40FD4F2E.9080602@psu.edu>
Source record: 92152

J999w wrote:
> Sounds like a dummy load, although I did work a friend 3 miles away with a 6
> inch wire end loaded with a soda can on 80 m once ...

Empty or full?

- Mike KB3EIA -

582. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 17:18:26 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040720131826.05775.00002042@mb-m05.aol.com>
Source record: 92153

>
>John Kraus W8JK has passed away at age 94. He is the inventor of the
>corner reflector, helix and W8JK antennas.
>
> Bob W8ERD
>
>

May he rest in peace! Great man, ham, he will be missed.
Perhaps another proof that RF doesn't kill or cause cancer, as propagated by hysterical FCC and other "RF danger" promoters.

73 OB

Yuri, B3BU

583. Re: dual cb antenna is it worth the trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 17:34:53 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <40fd5584.594043406@news.galilei.com>
Source record: 92154

Hi J

Many eons ago, almost more than I care to remember, I was using SIX 102 inch whips on my rig. They were actually two sets of three whips cophased together. Using three whips in a small 3 inch triangular pattern allowed the whips to be shortened so they would not clip the occasional low bridge. The purpose of cophasing was obvious, it was to get more front and rear directional along the roadway.

Whether you use a single whip on each side, twin whips or triple whips your spacing between the two units must be far enough apart for it to make any difference. Or, in our case, that big box behind us was like a shield to radio signals.

FWIW, a 1/4 wave magmount sitting on top of the trailer was often more effective in and around cities, where a 1/2 wave magmount was more effective on the road than the cophased whips. That is, until you crossed under a bridge and wiped them off the trailer.

Unless you can get those whips at least 8 feet apart, it's not really worth messing with!

TTUL
Gary

584. Re: Variable diameter antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 17:35:30 UTC
From: fractenna@aol.com
Message-ID: <20040720133530.11752.00001978@mb-m11.aol.com>
Source record: 92155

>And could variable diameter be of practical use in antenna design?

Tapered elements are common used in HF. They tend to load the antenna a bit, thus shortening it. Some BW increase results as well.

At the other extreme, a continuously inverse- tapered antenna is quite broad in bandwidth. Thus the Oliver Lodge, or 'bowtie' antenna, from 1897.

Old, old stuff.

73,
Chip N1IR

585. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 18:34:01 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <tAdLc.24294$mP3.15942@newssvr27.news.prodigy.com>
Source record: 92156

Not to mention , wrote the BIBLE on antenna theory! (Antennas by Kraus)
ISBN# 07-035410-3 McGraw-Hill Electrical & Electronics Encineering
Series 1950 . Sorry to see him go-- Jim NN7K

Yuri Blanarovich wrote:
>>John Kraus W8JK has passed away at age 94. He is the inventor of the
>>corner reflector, helix and W8JK antennas.
>>
>> Bob W8ERD
>>
>>
>
>
> May he rest in peace! Great man, ham, he will be missed.
> Perhaps another proof that RF doesn't kill or cause cancer, as propagated by
> hysterical FCC and other "RF danger" promoters.
>
> 73 OB
>
> Yuri, B3BU

586. Shock Spring for ATAS-120?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 19:08:19 UTC
From: eldeecee@hotmail.com
Message-ID: <3ad283fd.0407201108.12878317@posting.google.com>
Source record: 92157

I am mounting an ATAS-120 on my vehicle and have a concern about hitting something with the rigid part of the antenna. I do not find a shock spring solution that works for the SO-239 mount. Is there such a thing?

587. Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 19:17:24 UTC
From: Jan Simons PA0SIM <PA0SIMdeletespam@amsat.org>
Message-ID: <1090350868.360272@SLIPstream>
Source record: 92158

The Analog Devices AD8099 amplifier can be used for a
simple broadband small magnetic hf receiving loop:
http://home.plex.nl/~jmsi/Single%20chip%20amplifier.htm

Large signal behaviour is acceptable. At the least good
enough for some experimenting with loops.
This new chip is not expensive (abt $3). May be not yet very
good available. I recommend looking at the datasheet on:
http://www.analog.com

73 de Jan PA0SIM

588. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 19:28:51 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10fqsipngnfaide@corp.supernews.com>
Source record: 92159

Dear Bob:
Thanks for passing on the information.

Prof. Kraus was and is my mentor in grad. school. His kindness and caring for others, his willingness to work hard, and his generosity are also included in his legacy. He spoke softly, but in such a way that you wanted to run to meet his expectations.
Analogously to the custom in mathematics, I tell my worthy students that their Kraus number is 2 and that their students will be 3.
In addition to my father and my geology professor (James Zumberg), I have tried to emulate Prof. Kraus all of my life. They were the personification of the non-egotistical, helping genius. Too rare in any age.
Prof. Kraus was also a pioneer in radio astronomy producing, as I recall, the second atlas after Grote Reeber, who I once worked near. The two men were fast friends.
Let us all rejoice in such a long and productive life. If we can but approach a fraction, we will have lived well.

'till we meet again, 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Bob Dixon" <dixon.8@osu.edu> wrote in message
news:dixon.8-83E6D4.12115920072004@charm.magnus.acs.ohio-state.edu...
> John Kraus W8JK has passed away at age 94. He is the inventor of the
> corner reflector, helix and W8JK antennas.
>
> Bob W8ERD

589. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 19:35:21 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <ZteLc.127900$%_6.111388@attbi_s01>
Source record: 92160

I seem to recall .1 (that's point one) wavelength. Can't remember the source though. I used to have a memory but can't remember where I left it.

Paul AB0SI

"Steve Beyers" <sjbeyers@trianglenet.net> wrote in message news:72befaab.0407200712.64b92d38@posting.google.com...
> I remember reading somewhere that one way to determine the optimum
> number of buried radials for a vertical antenna is to use a specific
> value for the distance between the outer ends. (I'm not sure if this
> is the straight-line distance, or the length of a chord, but there
> wouldn't be much difference.) But I can't remember the value.
> Something like .05 wavelength rings a bell, but I'm not sure. Does
> anyone know what the value is and where I might have read it?
>
> Thanks -
>
> Steve W9HJW

590. Re: Circularly Polarized for LPFM

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 20:04:48 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10fqum6j4u9gje6@corp.supernews.com>
Source record: 92161

My antenna question only stimulated Mr. Fry, a continuing, constructive contributor to these proceedings. Here are some of the conclusions from our correspondence and our modeling:
1 "Ring-stub" is an appropriate name for this antenna and was found to be used by others.
2 Contributions to vertically and horizontally polarized far-field signals is proportional to the diameter of the ring (for H) and height of the stub (for V). [The first antenna that I looked at had disproportionally tall stubs.]
3 At 94 MHz, it appears that a diameter of something like 300 mm and a stub of about 230 mm about balances V and H. An optimum set of dimensions was not found. Too many parameters exist to allow quick convergence.
4 Radiation from the customary Gamma match used with this antenna significantly distorts the FS pattern. Placing the "arm" directly under one branch of the ring reduces the pattern distortion.
5 This type of antenna is usually mounted off to the side of a tower. Manufactures often speak of towers no larger that 3 or 4 inches in diameter. With reasonable offset distances from a 12 inch diameter metal pole (the tower that is likely to be used), the driving impedance changes dramatically.

This hitherto unknown (to me) antenna seems resistive to rational design and is a candidate for heuristic design - if at all. Once again, I ask if anyone has dimensions of a well working example of this antenna.

Mind, for LPFM stations, the FCC is concerned with the average (or rms) antenna gain. That is little changed with large changes in the shape of the pattern. The University wishes to know where the gain is going. Remember the first law of antennas: all antennas work. The second law is: some antennas work better in certain directions than other antennas.

73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"German NG Server" <rfry@adams.net> wrote in message news:2lt27dFgek11U1@uni-berlin.de...
> "J. McLaughlin" <JCM@Power-Net.Net> wrote
> >
> > 1. What is (are) the conventional name for this antenna? I have not

> > been able to find it in any of my references.
>
> Commonly called a "ring-stub" element. It was one of the earliest
methods
> of adding v-pol to an omni h-pol antenna of the "ring" design, popular
> before CP was authorized by the FCC.
>
> > 2. When I model one bay of the antenna I find that almost all of
the
> > radiation is vertically polarized. This is not at all surprising in
> > view of the symmetry of the horizontal element [the O].
> > What might I be doing wrong?
>
> There is a considerable h-pol component from the portion of the
element in
> the horizontal plane. But as h-pol and v-pol do not have the same
radiation
> center from this design AND the horizontal part of the radiator
generates a
> v-pol component for elevation angles not in the horizontal plane, the
axis
> of net maximum v-pol radiation in a ring-stub element is not located
in the
> vertical plane.
>
> The PDF slide show (Paper 10) at http://rfry.org includes NEC2 pattern
> studies of this and three other types of FM broadcast transmit
elements,
> showing the differences in their free-space surface patterns without
the
> effects of the tower.
>
> > Speculation: I may not have the dimensions correct though the
antenna I
> > modeled is resonant at 94 MHz. It is possible that venders are
equating
> > omni-directional-in-the-horizontal-plane with circularly polarized.
> >
> > I have an EZNEC file that I will send to anyone who wishes it.
> >
> > The impetus for these questions is a determination of an
appropriate
> > offset of these antennas from a large diameter tower.
>
> Paper 6 at http://rfry.org shows some of the affects of two nearby
tower
> structures on sidemounted FM broadcast transmit elements for one set
of
> conditions. Unfortunately the patterns cannot be applied to any other
> conditions.

>
> The best approach is to have the patterns measured by the antenna OEM,
using
> one or more mounting configurations preferred or possible in the final
> installation.
>
> R. Fry
>
>
>

591. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 20:20:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6suqf0pmaot2ch5u5pn80vaddm8r5ung66@4ax.com>
Source record: 92162

On Tue, 20 Jul 2004 19:17:24 -0000, "Jan Simons PA0SIM"
<PA0SIMdeletespam@amsat.org> wrote:

>The Analog Devices AD8099 amplifier can be used for a
>simple broadband small magnetic hf receiving loop:
>http://home.plex.nl/~jmsi/Single%20chip%20amplifier.htm
>
>Large signal behaviour is acceptable. At the least good
>enough for some experimenting with loops.
>This new chip is not expensive (abt $3). May be not yet very
>good available. I recommend looking at the datasheet on:
>http://www.analog.com
>
>73 de Jan PA0SIM
>

Hi Jan,

Indeed it is a nice chip from the Cadillac of linear designers.
However, what distinguishes it as being a good choice for a small
"magnetic" hf receiving loop?

The loop itself may restrict the input BW, but it takes more than that
to build a receiver. Consider, there are many other Op Amps that
deliver as much gain at HF and are purposefully designed for just
that.

To put some perspective to this; what about the AD8099 makes it better
than a diode detector and the classic ï¿½A-741?

73's
Richard Clark, KB7QHC

592. Internet Shared Station?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 20:23:36 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-9DA2B9.15233820072004@newssvr24-ext.news.prodigy.com>
Source record: 92163

I recall reading a posting about a number of stations with FB rigs and antennas that can be used via the internet.

I assume it is some kind of a club or time share arrangement and would like to find out more for ham with a broadband connection that is living in a retirement complex.

He would love to get back on the air again antennas are off limits at his R-QTH.

Dick, aa5vu

call at arrl.net

593. Re: Long wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 21:08:22 UTC
From: Thierry <"Answer direct via http">
Message-ID: <40fd89c8$1@news.vo.lu>
Source record: 92165

Hi,

Here are some info with additional data that I did last week :
http://www.astrosurf.com/lombry/antenna.htm

For receining purposes try also the magnetic loop
http://www.astrosurf.com/lombry/qsl-ala330.htm

73
Thierry, ON4SKY

"James" <jrapier@dcr.net> wrote in message
news:cBDIc.89$jY4.71@fe39.usenetserver.com...
> I can barely spell antenna but I was thinking of putting up a long wire
> antenna outside for a shortwave receiver I have. My questions are these.
>
> How long should it be?
> Does it need to be vertical, horizontal or somewhere in between? Which is
> best?
> What about guage of the wire? Radio Shack has a 70 foot stranded copper
wire
> 14 guage with a couple of insulators as some sort of kit.
> Could something like this be strung on steel insulated fence posts that
are
> normally used for keeping livestock from wandering? That would put it
close
> to the ground. I know that higher is always better.
>
> I have a 35+ year old transistor Japanese shortwave radio that had a
broken
> (and lost) whip antenna. I installed another whip with a little soldering,
> bought a generic ac adapter and lo and behold it worked pretty well. A
> little hum but acceptable. I thought that it would not cost a lot of dough
> to put an outside long wire antenna out there to receive some
international
> stuff. It brought in some with just the whip but quality of signal should
be
> much better in my estimation. I have lotsa room on the place here.
>
> Any answers, tips or suggestions would be welcome. I thought if it worked
> out I might invest in a new shortwave receiver of some kind. Any
suggestions
> as to that would also be appreciated. I have been thinking of a Grundig
800
> but only done limited research so far.

>
>
>

594. Re: Internet Shared Station?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 21:40:26 UTC
From: Fabian Kurz <REM0V3TH1Smail@fkurz.net>
Message-ID: <2m5hqaFijlqqU1@uni-berlin.de>
Source record: 92166

Dick, AA5VU <aa5vuNOSPAM@arrl.net> wrote:
> I recall reading a posting about a number of stations with FB rigs and
> antennas that can be used via the internet.

There are for example W7DXX (http://www.lamonica.com/) and YT6A
(http://www.yt6a.com/remote/) who have remote controllable stations.

I am sure there are some more stations available, google is your friend.

73, Fabian

--
Fabian Kurz, DJ1YFK * http://fkurz.net/

595. Re: cushcraft R7

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 22:00:13 UTC
From: DAVID BROWNE <david.browne7@ntlworld.com>
Message-ID: <NBgLc.442$pm6.69@newsfe3-gui.ntli.net>
Source record: 92164

thanks,
"Irv Finkleman" <finkirv@shaw.ca> wrote in message
news:40FC2E91.509F0C69@shaw.ca...
> DAVID BROWNE wrote:
> >
> > hi can any one give me the measurements for each section, as the web
site
> > pdf file is not clear
> > thanks david browne
> >
> > david.browne5@btinternet.com
> >
> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.721 / Virus Database: 477 - Release Date: 16/07/2004
>
> As Per PDF File (I set mine the same way and it worked well)
> distance A=123", B=10-5/8", C=6", D=16", E=16" and F has three settings,
> CW=28", Center of band=22", Phone=17-1/8".
>
> Irv VE6BP
>
>
> --
> ---------------------------------------
> Diagnosed Type II Diabetes March 5 2001
> Beating it with diet and exercise!
> 297/215/210 (to be revised lower)
> 58"/43"(!)/44" (already lower too!)
> ---------------------------------------
> Visit my HomePage at http://members.shaw.ca/finkirv/
> Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
> Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.723 / Virus Database: 479 - Release Date: 19/07/2004

596. Re: Alternative to BPL?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 22:23:14 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cdk64u$r0m$1@newshost.mot.com>
Source record: 92168

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7nmof0dtopjbf6rjda3r8hsh5l2ogtlm6k@4ax.com...
> On Mon, 19 Jul 2004 17:33:49 -0500, "Steve Nosko"
> <suteuve.nosukowicuz@moutouroula.com> wrote:
>
> >
> >"Alan" <alannc44@{nospam}ix.netcom.com> wrote in message
> >news:QfTKc.168985$tH1.6624436@twister.southeast.rr.com...
> >
> >
> >>
> >

http://www.usatoday.com/money/industries/technology/2004-07-14-wireless_x.htm

> >>
> >>
> >> Alan
> >> WN4HOG
> >
> >Broken link!
>
> Stick the hangin "m" on the end of the line.
>

Ahhh! mised that. Thanks, Steve

597. Re: Circularly Polarized for LPFM

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 22:28:26 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2m5kkkFj11mgU1@uni-berlin.de>
Source record: 92167

"J. McLaughlin" <JCM@Power-Net.Net> wrote:
> Mind, for LPFM stations, the FCC is concerned with the average (or
> rms) antenna gain. That is little changed with large changes in the
> shape of the pattern. The University wishes to know where the gain is
> going. Remember the first law of antennas: all antennas work. The
> second law is: some antennas work better in certain directions than
> other antennas.

True, the FCC is concerned only with the RMS gain of an "omni" FM broadcast antenna, no matter how bizarre its real patterns. The antenna OEM publishes his antenna gains based on perfectly omni patterns in the horizontal plane, and those values must be used when determining the ERP of an FM station -- no matter if the true patterns have multiple nulls in the horizontal plane that may be only 10 or 15% of that gain. The problem is in knowing what those true patterns are from an installed antenna.

Operating and installation details such as the tower width used, tower construction details, FM frequency, antenna azimuth/elevation/offset on the tower, presence and location of conduits and transmission lines and other metallic structure in and near the antenna aperture, tower guys etc all can have a significant, often unpredictable affect on the final radiation patterns from the installed antenna.

The safest way to know what the patterns of the installed antenna are likely to be is to have them measured on the OEM's test range, using a replica of the tower or pole on which the antenna will be installed including all the "stuff" in and near the antenna aperture, and the pick a mounting arrangement that produces the most omni patterns. For c-pol (and v-pol only) antennas, that may require adding vertical parasitics near each element to fill in the natural v-pol null caused by the antenna supporting structure, which is essentially vertical. (N.B. The patterns from FM transmit antennas mounted on towers of large cross-section are difficult to impossible to fully optimize using parasitics.)

R. Fry

Visit http://rfry.org for FM broadcast system papers.

598. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-20 23:57:24 UTC
From: Al <aldhearn@bellsouth.net>
Message-ID: <yjiLc.2749$QO.1351@bignews5.bellsouth.net>
Source record: 92169

A genius, a pioneer, and a great representative of amateur radio. I have all three of his "Antennas" books, which are bibles in this arena. Thanks and 73s John.

Al WA4GKQ

599. Re: J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 00:58:37 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <4uerf09i4eptp3i4bihdnu7t2hek7g73r8@4ax.com>
Source record: 92170

On Tue, 20 Jul 2004 14:44:06 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>
>"Jimmie" <Gfender@carolina.rr.com> wrote in message
>news:ogDKc.139245$wH4.7415098@twister.southeast.rr.com...
>> I am planning on building a 15 meter and possibly a 20 meter vertical J
>> antenna. Plans are for the bottom of the jay to be a position adjustable
>> strap. Below the strap the two pieces will be connected together by short
>> lengths of pipe welded to the vertival members. Tunning will be
>acomplished
>> by movimg the shorting strap and telescoping the long side. Will the
>shorts
>> below the strap have any significant electrical effects.
>>
>> Jimmie
>>
>>
>Just got through building a 10 M version of a J. Think a 20M version will be
>a lot longer than I had invisioned. While I knew the numbers before I
>started, the reality of how big it would be did not sink in until
>construction of the 10M antenna. I still want the 20 M vertical. Obviously
>some redesign is in order. Possibly I will constuct the J out of feedline
>and run it horizontally to the shack.
>

I kinda wondered if you realized a 20m "J" would be about 49' or 50'
of pipe. You need to put up a picture if you get the thing built :-)

If you construct it horizontally out of feedline it'd be like the end
fed "zepp" trailing antennas they used to hang out of air ships.

Bob
k5qwg

600. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 01:13:00 UTC
From: richardharrison@webtv.net
Message-ID: <28609-40FDC31C-782@storefull-3256.bay.webtv.net>
Source record: 92071

Steve, W9HJW wrote:
"Something like .05 wavelength (between ends of buried radials) rings a bell, but I`m not sure."

That would depend on the length and number of radials. But, the .05 number may be significant in the case of 120 radials. 120 radials is an FCC standard. Spacing is 3-degrees.

In a right triangle, the side opposite an angle is equal to the tanget times the adjacent side length. For a 3-degree angle, difference between the adjacent side and hypotenuse lengths is insignificant.

The tangent of 3-degrees is .05. The distance between radials spaced by 3-degrees is therefore very nearly .05 times the length of the radial. That`s my guess as to the source of Steve`s .05 number.

Best regards, Richard Harrison, KB5WZI

601. Re: Strange Antenna in old 73 magazine ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 01:40:03 UTC
From: j999w@aol.com
Message-ID: <20040720214003.22153.00000195@mb-m07.aol.com>
Source record: 92072

>> Sounds like a dummy load, although I did work a friend 3 miles away with a
>6
>> inch wire end loaded with a soda can on 80 m once ...
>
> Empty or full?
>
> - Mike KB3EIA -
>

Empty.

Interesting concept though.

Don't ask me about the time I stuck my microphone in the hose of a vacuum cleaner and keyed up ... same friend, different experiment. Sort of an expansion of the game "name this sound".

jw
k9rzz

602. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 01:40:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40fdca8d_6@corp.newsgroups.com>
Source record: 92073

Bob Dixon wrote:
> John Kraus W8JK has passed away at age 94. He is the inventor of the
> corner reflector, helix and W8JK antennas.

I'm really sorry to hear that. But his works will live in infamy.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

603. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 01:50:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40fdcd11_6@corp.newsgroups.com>
Source record: 92074

Reg Edwards wrote:
>>Depends upon the source of the noise. I remember a small shielded loop
>>being effective against localized electrical noise in my college dorm.

> Yes, but did it make any difference when you removed the shielding?

All I know is that it was extremely superior to a 5' telescoping vertical
receiving antenna. I was amazed and delighted at the difference. I could
copy Radio Moscow on my SX-99 which I couldn't even detect on the 5' vertical.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

604. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 02:03:49 UTC
From: richardharrison@webtv.net
Message-ID: <6413-40FDCF05-666@storefull-3253.bay.webtv.net>
Source record: 92075

Bob Dixon, W8ERD wrote:
"John Kraus W8JK has passed away at age 94. He was the inventor of the corner reflector, helix, and W8JK antennas."

Thanks to Bob for his posting. Sorry to lose a hero. Kraus antennas are used around the earth and in space. Kraus books are permanent sources of knowledge. Too bad Kraus did not live another 100 years.

Best regards, Richard Harrison, KB5WZI

605. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 03:18:18 UTC
From: richardharrison@webtv.net
Message-ID: <22642-40FDE07A-235@storefull-3257.bay.webtv.net>
Source record: 92076

Reg Edwards wrote:
"Yes, but did it make any difference when you removed the shielding?"

I think Mark Keith`s testimony is accurate. Signal grabbing depends on the area enclosed by the loop.

Small loops discriminate against noise due to their directional response. So, if the actual antenna is the shield or the contained conductor makes little difference except we have Terman`s testimony that the shield can equalize electrostatic response and in some cases reduce noise.

Best regards, Richard Harrison, KB5WZI

606. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 03:26:42 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <PnlLc.12268$GT3.6656@bignews6.bellsouth.net>
Source record: 92077

What effect would it cause if you ran a wire around the perimeter of the
radials - connecting them together ?
And I guess you could do it again at the half-way point so it resembles a
spider-web.
like a big fence just underground.... could you then reduce the length of
the radials??
I may just try this on a manageabe scale - say 10 meters

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:28609-40FDC31C-782@storefull-3256.bay.webtv.net...
> Steve, W9HJW wrote:
> "Something like .05 wavelength (between ends of buried radials) rings a
> bell, but I`m not sure."
>
> That would depend on the length and number of radials. But, the .05
> number may be significant in the case of 120 radials. 120 radials is an
> FCC standard. Spacing is 3-degrees.
>
> In a right triangle, the side opposite an angle is equal to the tanget
> times the adjacent side length. For a 3-degree angle, difference between
> the adjacent side and hypotenuse lengths is insignificant.
>
> The tangent of 3-degrees is .05. The distance between radials spaced by
> 3-degrees is therefore very nearly .05 times the length of the radial.
> That`s my guess as to the source of Steve`s .05 number.
>
> Best regards, Richard Harrison, KB5WZI
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004

607. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 04:20:57 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10frrquq5pnkh4e@corp.supernews.com>
Source record: 92078
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Thanks for the information. I think the best thing is just to get it up and see what happens!

Tam/WB2TT <t-tammaru@c0mca$t.net> wrote in message news:r_udnTyt5PSdVmfdRVn-sA@comcast.com...
> Doug,
> I put some numbers into EZNEC, and came up with:
>
> 20 meter support dipole, 34.1 feet long at 40 feet.
>
> 40 meter inverted V hanging from 20 meter dipole, 66.7 feet total length,
> with ends drooping down at 30 degrees.
>
> SWR is less than 2:1 from 14.0 - 14.4, and 7.0 - 7.4.
>
> Directivity is about 6db on 40m and 13 db on 20m. I think there would be
> some advantage to not having the antennas in the same plane.
>
> Tam/WB2TT
>
>

608. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 05:29:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1fvrf0llr8er2cr7h9jubsjorsqnb9en75@4ax.com>
Source record: 92079

On Tue, 20 Jul 2004 23:26:42 -0400, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>What effect would it cause if you ran a wire around the perimeter of the
>radials - connecting them together ?
>And I guess you could do it again at the half-way point so it resembles a
>spider-web.
>like a big fence just underground.... could you then reduce the length of
>the radials??
>I may just try this on a manageabe scale - say 10 meters
>

Hi Hal,

You would then think of the problem in terms of how far must ground
current traverse through soil to find a conductor? This is a loose
analogy because the current traveling through any patch of ground is
infinitesimal. Rather, it is the efficiency by which the radials
shield the antenna from the "bulk" of ground beneath it. Hence,
thinking of it in terms of 3D and proximity yields a better conceptual
model - further, it allows you to understand why elevated verticals
with fewer radials have an equal capacity for "getting out," or so
reports offer.

73's
Richard Clark, KB7QHC

609. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 06:38:14 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <uamnL4BW9g$AFAXN@ifwtech.co.uk>
Source record: 92080

Richard Harrison wrote:
>Steve, W9HJW wrote:
>"Something like .05 wavelength (between ends of buried radials) rings a
>bell, but I`m not sure."
>
>That would depend on the length and number of radials. But, the .05
>number may be significant in the case of 120 radials. 120 radials is an
>FCC standard. Spacing is 3-degrees.
>
>In a right triangle, the side opposite an angle is equal to the tanget
>times the adjacent side length. For a 3-degree angle, difference between
>the adjacent side and hypotenuse lengths is insignificant.
>
>The tangent of 3-degrees is .05. The distance between radials spaced by
>3-degrees is therefore very nearly .05 times the length of the radial.
>That`s my guess as to the source of Steve`s .05 number.
>
It also works, roughly, for shorter radials.

Jerry Sevick, W2FMI, published data on the effects of shorter radials on feedpoint impedance, and came to the conclusion that if you use shorter radials, there is little advantage in using very large numbers. If you re-plot Sevick's data, it turns out that, for a given length of radial, you only need about enough to ensure that the ends are about 0.05 wavelengths apart. Adding more radials of the same length will bring little further reduction in feedpoint impedance.

However, this is a "soft" limit, so others may interpret the same data to say that the limiting tip-to-tip spacing is different, even as little as 0.02 wavelengths.

The "tip-to-tip rule" is a useful guideline, but it isn't helpful to argue over the detail, because feed impedance isn't the only important criterion. Longer radials will also reduce losses due to ground reflection, and improve your low-angle signal in particular... but in order to make a difference at very low angles, the radials need to be very long indeed.

All the "tip-to-tip rule" is saying is: if the radials are as long as you can make them, and you already used enough to make the tips 0.05...0.02 wl apart, then you've done all you can. Go look for something else to improve.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

610. Re: Internet Shared Station?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 07:20:32 UTC
From: Helmut <MyCallSign@qsl.net>
Message-ID: <cdl5ffllm03$1@news.t-online.com>
Source record: 92081

Hello, Dick and the group,

Have a look at www.w4mq.com , Stan Schretters website. He developed and setup tis whole system. Currently, there are some 5 or 6 stations accessible over the internet. Some are closed club systems, some are open for public (ham only) use worldwide. Including stations in the US (MA,VA,GA,CA,FL), VK3, EA8, there might be more of them for private use by their owners.

You can use this software to remotely control your Kenwood TS2000, Tuner, Amp and Beam over Internet connection, and due to the small amount of bandwith, even with dialup access (but not recommended).

www.w7dxx.com
www.daves-portal.com
http://tnsley.tripod.com/w6wtg/
http://www.olt.net/hams/

These are some additional links for you to check out, how those guys accomplished to put their stations on the net.

Hope to meet you on the air from one of the remotes.
I am frequently QRV in PSK and SSB from one of the Internet Remote Bases on 20m, mostly around 0400z.

73 de OE8SOQ
Helmut

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> schrieb im Newsbeitrag
news:aa5vuNOSPAM-9DA2B9.15233820072004@newssvr24-ext.news.prodigy.com...
| I recall reading a posting about a number of stations with FB rigs and
| antennas that can be used via the internet.
|
| I assume it is some kind of a club or time share arrangement and would
| like to find out more for ham with a broadband connection that is living
| in a retirement complex.
|
| He would love to get back on the air again antennas are off limits at
| his R-QTH.
|
| Dick, aa5vu
|
| call at arrl.net

611. Muilti band quad with a single loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 07:51:07 UTC
From: tj <no@junk.com>
Message-ID: <cdl794ren2@phys-news1.kolumbus.fi>
Source record: 92082

Hello,

Steppir has the tunable yagi antennas:

http://www.steppir.com/products/prod-3el.htm

In those, the yagi element lengths are changed according to each band. I am thinking of doing a homebrew antenna based on the same principle. My antenna would be a three element quad. It would have two booms, both having three 4m long horizontal glasfibre pipes. Thus, the boom with the pipes would look like a 3-el yagi. The upper boom would be attached to the tower and the lower boom would be hanging from the antenna wires of the three elements. The lower boom would go up and down depending on the band and the total loop length. The three motors would be located on the upper boom. The wire would propably be a steel wire. With 4m pipes the distance of the upper and lower boom would vary from 1m (4m+1m+4m+1m=10m band) to 6m (4m+6m+4m+6m=20m band). On the end of each pipe there would be a small wheel to assist the sliding of the wire.

The whole thing would be microprocessor controlled (8051, Atmel AVR etc). At the beginning it would have to be tuned to each band in order to extract the correct loop lengths. The lengths would be stored to the flash memory of the microprocessor.

What do you think? The element spacing would be fixed, is that ok?

oh1meq

612. Re: Circularly Polarized for LPFM

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 08:58:37 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2m6pi3Fiv4gaU1@uni-berlin.de>
Source record: 92083

"J. McLaughlin" <JCM@Power-Net.Net> wrote
>With reasonable offset distances from a 12 inch diameter
> metal pole (the tower that is likely to be used), the driving
> impedance changes dramatically.

The input impedance of any/all sidemount antennas (ring-stub or otherwise) is affected by the electrical environment in which they operate. A common input spec for a sidemount FM transmit antenna without on-site matching is ~1.5:1 VSWR. FM transmit antennas with input VSWRs greater than about 1.15:1 across the 200kHz bandwidth of the channel can noticeably reduce stereo and SCA performance.

A transformer can be installed at the junction of the antenna input and main transmission line to provide a way to optimize the match after antenna system installation. But this takes some rather good test equipment, not just the typical in-line wattmeter (Bird, etc) or the VSWR meter in the transmitter.

Note that installing and adjusting an input matching transformer on an FM transmit antenna does not affect antenna radiation patterns. Final patterns are a function of the antenna design, and the electrical environment around the antenna (within several wavelengths).

R. Fry

613. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 09:54:08 UTC
From: Jan Simons PA0SIM <PA0SIMdeletespam@amsat.org>
Message-ID: <1090403474.672600@SLIPstream>
Source record: 92084

```
----- Original Message -----
From: "Richard Clark" <kb7qhc@comcast.net>
Newsgroups: rec.radio.amateur.antenna
Sent: Tuesday, July 20, 2004 20:20
Subject: Re: Single chip magn loop RX antenna

> On Tue, 20 Jul 2004 19:17:24 -0000, "Jan Simons PA0SIM"
> <PA0SIMdeletespam@amsat.org> wrote:
>
> >The Analog Devices AD8099 amplifier can be used for a
> >simple broadband small magnetic hf receiving loop:
> >http://home.plex.nl/~jmsi/Single%20chip%20amplifier.htm
> >
> >Large signal behaviour is acceptable. At the least good
> >enough for some experimenting with loops.
> >This new chip is not expensive (abt $3). May be not yet very
> >good available. I recommend looking at the datasheet on:
> >http://www.analog.com
>
> Indeed it is a nice chip from the Cadillac of linear designers.
> However, what distinguishes it as being a good choice for a small
> "magnetic" hf receiving loop?
Richard, thanks for the reply.
The AD8099 is an ultralow distortion low noise high speed opamp.
You need all three: ultra low distroriton, low noise and high speed/BW.
I dont know an other single chip opamp with these very good specs.
If someone knows a better one, please let me know.

>
> The loop itself may restrict the input BW, but it takes more than that
> to build a receiver. Consider, there are many other Op Amps that
> deliver as much gain at HF and are purposefully designed for just
> that.
> To put some perspective to this; what about the AD8099 makes it
> better than a diode detector and the classic A-741?
Of course it only makes the loop antenna, not the receiver.

73 de Jan PA0SIM
```

614. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 12:55:09 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <NItLc.3116$sx2.1274@fe2.columbus.rr.com>
Source record: 92085

IEEE has a short professional biography of Dr. John D. Kraus W8JK
at: http://www.ieee.org/organizations/history_center/legacies/kraus.html

Here is a copy of a newspaper article from 10 years ago that
describes some of Dr. Kraus' accomplishments specific to radio
astronomy and SETI, especially at the Big Ear Radio Observatory.
http://www.bigear.org/kraus.htm

I recommend that *all* Amateurs that they read Dr. Kraus' book
'Big Ear' (now available as 'Big Ear Two'). It's largely an
autobiography, but not of the boring "I did this, then I did that" type.
It's an interesting tour through radio and technology in the
period paralleling Dr. Kraus' life in the 20th Century, from his
viewpoint in story-telling style. Here's a short review and some
information about the 'Big Ear Two' book:
http://patriot.net/~jlazio/essays/review4.html
http://www.cqbooks.com/bigear2.htm

I also liked his book 'Our Cosmic Universe', which is a non-technical
description of astronomy (of all types) in the 20th Century.
http://www.cqbooks.com/universe.htm

73,
Jeff K8ND

"Bob Dixon" <dixon.8@osu.edu> wrote in message
news:dixon.8-83E6D4.12115920072004@charm.magnus.acs.ohio-state.edu...
> John Kraus W8JK has passed away at age 94. He is the inventor of the
> corner reflector, helix and W8JK antennas.
>
> Bob W8ERD

615. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 13:29:43 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <2duLc.473$re2.180@fe39.usenetserver.com>
Source record: 92086

Do you know the arrangements, Bob?

Those in the area that knew him may want to attend. Or is it a private family service?

For those just tuning in, I was one of his last students. Maybe one more after me. He was always kind and courteous. One thing I remember is that he always insisted on being called John, not 'Dr. Kraus'.

--
Jim
N8EE
(Former W8JK student. OSU class of 1988)

to email directly, send to my call sign at arrl dot net
"Bob Dixon" <dixon.8@osu.edu> wrote in message
news:dixon.8-83E6D4.12115920072004@charm.magnus.acs.ohio-state.edu...
> John Kraus W8JK has passed away at age 94. He is the inventor of the
> corner reflector, helix and W8JK antennas.
>
> Bob W8ERD

616. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 13:36:34 UTC
From: richardharrison@webtv.net
Message-ID: <27590-40FE7162-2@storefull-3251.bay.webtv.net>
Source record: 92087

Hal Rosser wrote:
"What effect would it cause if you ran a wire around the perimeter of the radials - connecting them together."

That would enable and enhance current travel in circles around the antenna base of no value to the radiated signal but a loss sink for precious power. Ed Laport in "Radio Antenna Engineering" warns against this "hysteresis current" product in several places and refers to it as a "former practice". Ed had the benefit of working with Brown, Lewis, and Epstein at RCA and used their data liberaly in his book.

Best regards, Richard Harrison, KB5WZI

617. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 14:21:52 UTC
From: richardharrison@webtv.net
Message-ID: <6745-40FE7C00-7@storefull-3255.bay.webtv.net>
Source record: 92088

Ian White, G3SEK wrote:
"It also works, roughly for shorter radials."

Yes. .05 times the length along radials spaced at 3-degrees gives the approximate distance distance between them at any point. It doesn`t have to be between tips, just the same distance from the tower on both adjacent radials.

Ed Laport says more and longer radials is better, but there is a point of diminishing returns which occurs at 1/2-wavelength.

I`ve seen other reports that radial wire is better used when cut into more and shorter radials.

The FCC`s 120 radials of 1/4-wavelength has been efficient for medium waves in thousands of instances in all types of soil. It`s overkill in highly conductive soil, but regulations must be somewhat uniform for satisfactory enforcement. FCC`s rule is based on B,L,& E`s research. As I recall, B, L, & E worked at 3 MHz.

Best regards, Richard Harrison, KB5WZI

618. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 14:40:41 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <qImdnW0ENJrBHWPdRVn-oA@comcast.com>
Source record: 92089
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10frrquq5pnkh4e@corp.supernews.com...
> Thanks for the information. I think the best thing is just to get it up
and
> see what happens!
>
> Tam/WB2TT <t-tammaru@c0mca$t.net> wrote in message
> news:r_udnTyt5PSdVmfdRVn-sA@comcast.com...
> > Doug,
> > I put some numbers into EZNEC, and came up with:
> >
> > 20 meter support dipole, 34.1 feet long at 40 feet.
> >
> > 40 meter inverted V hanging from 20 meter dipole, 66.7 feet total
length,
> > with ends drooping down at 30 degrees.
> >
> > SWR is less than 2:1 from 14.0 - 14.4, and 7.0 - 7.4.
> >
> > Directivity is about 6db on 40m and 13 db on 20m. I think there would be
> > some advantage to not having the antennas in the same plane.
> >
> > Tam/WB2TT
> >
Doug,
If you go with the 20/40, you have to trim the 40 m first, because it has
more effect on the 20 than the 20 does on the 40.

Tam

619. Re: J antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 15:32:38 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <q0wLc.144262$wH4.7836788@twister.southeast.rr.com>
Source record: 92092

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:4uerf09i4eptp3i4bihdnu7t2hek7g73r8@4ax.com...
> On Tue, 20 Jul 2004 14:44:06 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >
> >"Jimmie" <Gfender@carolina.rr.com> wrote in message
> >news:ogDKc.139245$wH4.7415098@twister.southeast.rr.com...
> >> I am planning on building a 15 meter and possibly a 20 meter vertical J
> >> antenna. Plans are for the bottom of the jay to be a position
adjustable
> >> strap. Below the strap the two pieces will be connected together by
short
> >> lengths of pipe welded to the vertival members. Tunning will be
> >acomplished
> >> by movimg the shorting strap and telescoping the long side. Will the
> >shorts
> >> below the strap have any significant electrical effects.
> >>
> >> Jimmie
> >>
> >>
> >Just got through building a 10 M version of a J. Think a 20M version will
be
> >a lot longer than I had invisioned. While I knew the numbers before I
> >started, the reality of how big it would be did not sink in until
> >construction of the 10M antenna. I still want the 20 M vertical.
Obviously
> >some redesign is in order. Possibly I will constuct the J out of feedline
> >and run it horizontally to the shack.
> >
>
> I kinda wondered if you realized a 20m "J" would be about 49' or 50'
> of pipe. You need to put up a picture if you get the thing built :-)
>
> If you construct it horizontally out of feedline it'd be like the end
> fed "zepp" trailing antennas they used to hang out of air ships.
>
> Bob
> k5qwg
>
>
Yes ,I have a 50 foot lightpole to mount it on. Figure the 1/2wl element
will hang with its center at the top of the pole. Open wire line will form

thr J/transmission line.

620. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 15:35:01 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <4nKyEHUl0o$AFA3G@ifwtech.co.uk>
Source record: 92090

Richard Harrison wrote:
>Ian White, G3SEK wrote:
>"It also works, roughly for shorter radials."
>
>Yes. .05 times the length along radials spaced at 3-degrees gives the
>approximate distance distance between them at any point.

The original poster was asking about the guideline of 0.05 wavelengths distance between the tips of the radials, independent of the length. When I replied "It works...", that's what I meant by "it".

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

621. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 15:47:37 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <ef3tf0pp7f12ku22svvk4pmh4jkqf6115b@4ax.com>
Source record: 92091

John Kraus was also my mentor through his great book, "Antennas", Ed 1. John was also a close friend of another of my mentors, and colleague, Dr. George H. Brown. John credited Brown for originating the concept of increasing antenna gain through close spacing of the elements, which resulted in the two-element W8JK beam. Brown was ridiculed for suggesting such blasphemy, even by the US Patent Office in rejecting his patent application. But it was JK who realized its significance and applied it.

It is sad and unfortunate that such a great person has to leave us. Thus endeth his great contributions.

Walt Maxwell, W2DU

622. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 16:11:54 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10ft5e8msjk1250@corp.supernews.com>
Source record: 92093

Explain, please. What is wrong with Kraus's works?

Alan AB2OS

On 07/20/04 09:40 pm Cecil Moore put fingers to keyboard and launched
the following message into cyberspace:

>> John Kraus W8JK has passed away at age 94. He is the inventor of the
>> corner reflector, helix and W8JK antennas.

> I'm really sorry to hear that. But his works will live in infamy.

623. Re: Muilti band quad with a single loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 16:25:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6d5tf0tr4eq3sbcskielj6ef2gj1se40ki@4ax.com>
Source record: 92094

On Wed, 21 Jul 2004 10:51:07 +0300, tj <no@junk.com> wrote:

>What do you think? The element spacing would be fixed, is that ok?
>
>oh1meq

Hi OM,

Certainly sounds ambitious. As for fixed spacing, you would be sacrificing an optimal separation, but that would be the least of your problems as you describe the design.

>With 4m pipes the
>distance of the upper and lower boom would vary from 1m (4m+1m+4m+1m=10m
>band) to 6m (4m+6m+4m+6m=20m band).

This describes (I presume) three equal sized elements for either band (and I would further presume, for bands in between too). What makes one a director, one a fed element, or one a reflector? If they vary independently to maintain those relationships; then being fixed top and bottom by another boom may offer some problem. Then again, maybe not, it isn't that much different and the two booms would only pull slightly together.

As for the rectangular shape for the 10M band, that is a very different feed Z than the more square shaped on at 20M.

You are going to need modeling to be able to find the separations of the elements that work over these frequencies as well as to find the feed point Zs. The rest are simply mechanics, which unfortunately may be the easy part.

73's
Richard Clark, KB7QHC

624. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 16:36:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <266tf0l6ctqtml15hv9lb9u6719c60svev@4ax.com>
Source record: 92095

On Wed, 21 Jul 2004 09:54:08 -0000, "Jan Simons PA0SIM"
<PA0SIMdeletespam@amsat.org> wrote:

>Richard, thanks for the reply.
>The AD8099 is an ultralow distortion low noise high speed opamp.
>You need all three: ultra low distroriton, low noise and high speed/BW.
>I dont know an other single chip opamp with these very good specs.
>If someone knows a better one, please let me know.

Hi Jan,

Yes, the AD8099 has all of these qualities, but it is arguable they are "necessary." There have been any number of chips from Analog Devices for years that have had the best distortion, noise, speed, etc. This chip is simply the newest in that line.

There is a world of design to make any of these chips work for your purpose, but you have not actually specified that purpose. In the world of engineering this chip selection is called "a solution in search of a problem."

Is it going to be the pre-amp to a receiver? Is it going to be the receiver? Will it be gain controlled? What gain will it need? What feedback do you plan to use? Do you know how much noise it will see? How much out-of-band voltage will it see? The more important considerations have been undiscussed: CMRR is one that can blind-side you (or the worse PSRR).

In short, could a simple low noise transistor replace it?

73's
Richard Clark, KB7QHC

625. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 17:48:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <40fead79$1_3@corp.newsgroups.com>
Source record: 92097

Minnie Bannister wrote:
> Explain, please. What is wrong with Kraus's works?

Mea Culpa! I would have bet $100 that the definition of infamy was
"forever famous". I had no idea that it is defined only in a negative
context. When people said I was "infamous" on this newsgroup, I took
it as a compliment. I believe the modern appropriate response is:

My bad!

John Kraus is one of my heroes. My ignorance of the definition of
a word certainly wasn't intended to dim his accomplishments.
--
73, Cecil

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

626. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 17:53:58 UTC
From: Jan Simons PA0SIM <PA0SIMdeletespam@amsat.org>
Message-ID: <1090432262.820212@SLIPstream>
Source record: 92096

"Richard Clark" <kb7qhc@comcast.net> schreef in bericht
news:266tf0l6ctqtml15hv9lb9u6719c60svev@4ax.com...
> On Wed, 21 Jul 2004 09:54:08 -0000, "Jan Simons PA0SIM"
> <PA0SIMdeletespam@amsat.org> wrote:
>
> >Richard, thanks for the reply.
> >The AD8099 is an ultralow distortion low noise high speed opamp.
> >You need all three: ultra low distroriton, low noise and high speed/BW.
> >I dont know an other single chip opamp with these very good specs.
> >If someone knows a better one, please let me know.
>
> Hi Jan,
>
> Yes, the AD8099 has all of these qualities, but it is arguable they
> are "necessary." There have been any number of chips from Analog
> Devices for years that have had the best distortion, noise, speed,
> etc. This chip is simply the newest in that line.
>
> There is a world of design to make any of these chips work for your
> purpose, but you have not actually specified that purpose. In the
> world of engineering this chip selection is called "a solution in
> search of a problem."
>
> Is it going to be the pre-amp to a receiver? Is it going to be the
> receiver? Will it be gain controlled? What gain will it need? What
> feedback do you plan to use? Do you know how much noise it will see?
> How much out-of-band voltage will it see? The more important
> considerations have been undiscussed: CMRR is one that can blind-side
> you (or the worse PSRR).
>
> In short, could a simple low noise transistor replace it?
Richard,
for a shortwave broadband receiving antenna (my purpose) you
need even better specs that this chip gives you. I don't know of a
better (available) single chip amplifier for a broadband "magnetic"
loop. Of course when you are able to design your own chip .....

That's why I have designed a 6 transistor broadband amplifier
for the broadband "magnetic" loop. I don't want to bother this
group with all the design aspect. This amplifier is not that difficult
to build, but it takes more time to build than the single chip
amplifier. So this chip is a simpler alternative for someone who
want to try "magnetic" loops. That's all.

The 6 transistor amplifier however gives much better results:
http://home.plex.nl/~jmsi/Broadband%20amplifier.htm

73 de Jan PA0SIM

627. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 18:15:02 UTC
From: Jeff Maass <jmaass@columbus.rr.com>
Message-ID: <GoyLc.1441$AF6.197@fe1.columbus.rr.com>
Source record: 92098

There is now a nice article about Dr. Kraus posted to the ARRL web
site at: http://www.arrl.org/news/stories/2004/07/21/1/

73,
Jeff K8ND

"Bob Dixon" <dixon.8@osu.edu> wrote in message
news:dixon.8-83E6D4.12115920072004@charm.magnus.acs.ohio-state.edu...
> John Kraus W8JK has passed away at age 94. He is the inventor of the
> corner reflector, helix and W8JK antennas.
>
> Bob W8ERD

628. Re: Muilti band quad with a single loop?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 18:24:31 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10ftd6gs8ecq5ea@corp.supernews.com>
Source record: 92099

take a gander at this quad.....only one driven element...
http://www.titanex.de/frames/quads.html

"tj" <no@junk.com> wrote in message
news:cdl794ren2@phys-news1.kolumbus.fi...
> Hello,
>
> Steppir has the tunable yagi antennas:
>
> http://www.steppir.com/products/prod-3el.htm
>
> In those, the yagi element lengths are changed according to each band. I
> am thinking of doing a homebrew antenna based on the same principle. My
> antenna would be a three element quad. It would have two booms, both
> having three 4m long horizontal glasfibre pipes. Thus, the boom with the
> pipes would look like a 3-el yagi. The upper boom would be attached to
> the tower and the lower boom would be hanging from the antenna wires of
> the three elements. The lower boom would go up and down depending on the
> band and the total loop length. The three motors would be located on the
> upper boom. The wire would propably be a steel wire. With 4m pipes the
> distance of the upper and lower boom would vary from 1m (4m+1m+4m+1m=10m
> band) to 6m (4m+6m+4m+6m=20m band). On the end of each pipe there would
> be a small wheel to assist the sliding of the wire.
>
> The whole thing would be microprocessor controlled (8051, Atmel AVR
> etc). At the beginning it would have to be tuned to each band in order
> to extract the correct loop lengths. The lengths would be stored to the
> flash memory of the microprocessor.
>
> What do you think? The element spacing would be fixed, is that ok?
>
> oh1meq

629. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 18:28:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ftdebg6mmsbba@corp.supernews.com>
Source record: 92100

Richard Harrison wrote:
> . . .
> The FCC`s 120 radials of 1/4-wavelength has been efficient for medium
> waves in thousands of instances in all types of soil. It`s overkill in
> highly conductive soil, but regulations must be somewhat uniform for
> satisfactory enforcement. FCC`s rule is based on B,L,& E`s research. As
> I recall, B, L, & E worked at 3 MHz.

We should always be careful in applying commercial broadcast standards to ham radio. For a broadcaster, the gain of a few percent in radiated field represents a measurable increase in the audience size, hence a significant increase in annual revenue, so it's worth a considerable one-time cost. For most amateurs, it represents only a fraction of a dB of signal strength, so isn't worthwhile.

Roy Lewallen, W7EL

630. FS: Full run of COSMIC SEARCH

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 18:45:43 UTC
From: fractenna@aol.com
Message-ID: <20040721144543.29660.00001879@mb-m16.aol.com>
Source record: 92101

Full run of 13 issues of COSMIC SEARCH--SETI magazine founded and edited by the great (now, sadly, SK) John Kraus, W8JK. Not bound, but in excellent condition. Lots of antenna related stuff. Collector's item. Will sell for $150 , goes up on e-bay for far more on 28 July if doesn't sell. Drop me an e-mail if interested before then.

73,
Chip N1IR

631. Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 19:10:04 UTC
From: Inthemedia@yahoo.com
Message-ID: <22d08eeb.0407211110.7a9b5dc1@posting.google.com>
Source record: 92102

This question may be slightly offtopic but I figured I would post to the group that knows antennas best. I have 2 TV antennas, one VHF and one UHF, that I would like to combine to use a single coax feed. The specs on a suitable joiner state it has .5dB insertion loss with 30dB rejection between ports. The specs on a typical splitter are 3.5dB loss and only 20dB between ports. The question I have is why would anyone ever use a splitter instead of a joiner? Are there any applications where you couldn't use a joiner instead of a splitter? Thank you.

632. Re: Contact Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 21:10:56 UTC
From: N2EY@AOL.COM
Message-ID: <c2356669.0407211310.295a0528@posting.google.com>
Source record: 92103
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:<10fidrdflcpnnda@corp.supernews.com>...
> I am new to HF having just passed my General and code tests.

Congratulations!

> I am putting up
> a dipole the will be running due East/West at about 40ft.

What sort of dipole (how long/what transmission line)?

> I really have no
> other options for installation and cannot run it North/South. I am in lower
> Michigan. My question is will I be able to make any East Coast contacts
> with this?

Yes, particularly on 80 and 40 meters.

> Specifically, I'd like to be able to monitor the W1AW bulletins,
> code runs etc.

You will have no problem. W1AW runs full power into some pretty good
antennas.

With the antenna only 40 feet up (a little over a quarter wave on 40
and eighth wave on 80) the pattern will not have sharp nulls. You'll
hear plenty.

Just put it up and enjoy it.

73 es GL de Jim, N2EY

633. Re: Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 22:01:15 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <Yq2dnSaRM4A2emPdRVn-rA@comcast.com>
Source record: 92104

"T.C. Mann" <Inthemedia@yahoo.com> wrote in message
news:22d08eeb.0407211110.7a9b5dc1@posting.google.com...
> This question may be slightly offtopic but I figured I would post to
> the group that knows antennas best. I have 2 TV antennas, one VHF and
> one UHF, that I would like to combine to use a single coax feed. The
> specs on a suitable joiner state it has .5dB insertion loss with 30dB
> rejection between ports. The specs on a typical splitter are 3.5dB
> loss and only 20dB between ports. The question I have is why would
> anyone ever use a splitter instead of a joiner? Are there any
> applications where you couldn't use a joiner instead of a splitter?
> Thank you.

They are different things. A joiner separates (or combines) the UHF from the VHF with filters. That is why there is so little loss. If you used one to feed two TVs, one of the TVs would get the UHF, the other the VHF. The splitter is more or less frequency independent, and feeds half the power to each output.

Tam/WB2TT

634. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 22:03:04 UTC
From: richardharrison@webtv.net
Message-ID: <19847-40FEE818-18@storefull-3258.bay.webtv.net>
Source record: 92106

Walter Maxwell, W2DU wrote:
Brown was ridiculed for suggesting such blasphemy, even by the U.S. Patent Office in rejecting his patent application."

Yes. I remember reading John Kraus` account of the situation. As I recall, the IRE rejected George Brown`s findings and would not publish his paper. Kraus figuered the IRE wouldn`t publish a similar paper from him either. So he waited his time until he had a related paper to publish and then Kraus attached Brown`s work. It sailed through the reviewers and was published.

Best regards, Richard Harrison, KB5WZI

635. Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 22:12:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cdmpp4rqa1@sparta.btinternet.com>
Source record: 92105

Each individual radial is obviously a single-wire transmission line buried in a lossy medium.

As with all lines, it has Zo and attenuation, and when length is being considered its propagation velocity is of great importance.

Due to the very high permittivity of water (80) and the water content of all soils, rocks even, the velocity factor VF along a buried wire is much smaller than the free space value. Even when just resting on a slightly damp soil surface the VF roughly falls to 0.5 which can be easily checked with a hand-held antenna analyser. A 1/8-wavelength of wire behaves as a 1/4-wavelength when on the soil surface but with a poor Q.

Soil permittivity K is tabled alongside soil resistivity (conductivity). Velocity in a transmission line is proportional to 1/Sqrt(K). So a typical value of K of 14 results in a velocity factor of 1/Sqrt(14) = 0.267 i.e., only 27 percent of the free space velocity.

Attenuation along a buried wire is quite high. Typically it is 8 to 10 dB per 1/4 wavelength at its own velocity depending on soil composition.

Therefore, not only is a buried radial VERY much shorter than its free-space value, there's not a lot of current flowing in it near its end - and if there's little current flowing in it, it may just as well not be there.

There is not much point in increasing length of radials beyond that when input impedance of the line is already Zo.

The moral is - if you have any wire remaining after laying some short radials then don't use it to increase their length - increase their number!

For performance of radials in quantitative terms there are 4 programs which may be of interest at my website.

EARTHRES analyses DC and VLF performance of ground rods, plates, etc., and of a system of ground radials of any number and length.

RADIOETH demonstrates behaviour versus length at VLF to HF of a single radial wire.

ENDFEED and TANT136 integrate the calculations of the first two programs by incorporating them in working models of inverted-L and T-antennas respectively.

Remember the accuracy of performance predictions depends on how accurate you know the soil resistivity and permittivity in the vicinity of your antenna.

.....

Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

636. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 22:34:18 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.21.22.34.18.183505@127.0.0.1>
Source record: 92107

On Wed, 21 Jul 2004 17:53:58 +0000, Jan Simons PA0SIM wrote:

>
> The 6 transistor amplifier however gives much better results:
> http://home.plex.nl/~jmsi/Broadband%20amplifier.htm
>
> 73 de Jan PA0SIM
Jan,
I have been trying to get to your site there for a rather long while.
home.plex.nl keeps timing out on me with no return results...

are they having issues you don't know about?

DE N7ZZT
Eric Oyen
Phoenix Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

637. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-21 23:40:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qjvtf0paait7p31jm5trgmq0fcf5nb9lqc@4ax.com>
Source record: 92108

On Wed, 21 Jul 2004 15:34:18 -0700, Eric Oyen - N7ZZT
<n7zzt@127.0.0.1> wrote:

>On Wed, 21 Jul 2004 17:53:58 +0000, Jan Simons PA0SIM wrote:
>
>>
>> The 6 transistor amplifier however gives much better results:
>> http://home.plex.nl/~jmsi/Broadband%20amplifier.htm
>>
>> 73 de Jan PA0SIM
>Jan,
>I have been trying to get to your site there for a rather long while.
>home.plex.nl keeps timing out on me with no return results...
>
>are they having issues you don't know about?
>
>DE N7ZZT
>Eric Oyen
>Phoenix Arizona

Hi Eric,

I got through when his post appeared, I got through when I read your
post above.

73's
Richard Clark, KB7QHC

638. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 09:18:44 UTC
From: Eric Oyen - N7ZZT <n7zzt@127.0.0.1>
Message-ID: <pan.2004.07.22.09.18.44.182997@127.0.0.1>
Source record: 92109

On Wed, 21 Jul 2004 23:40:16 +0000, Richard Clark wrote:

> On Wed, 21 Jul 2004 15:34:18 -0700, Eric Oyen - N7ZZT
> <n7zzt@127.0.0.1> wrote:
>
>> [quoted text muted]
>
> Hi Eric,
>
> I got through when his post appeared, I got through when I read your
> post above.
>
> 73's
> Richard Clark, KB7QHC

curious. must be a routing issue from here to there then.

DE N7ZZT
Eric Oyen
Phoenix, Arizona

--
the difference between intelligence and stupidity is that intelligence
has its limits.

639. Re: Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 10:25:49 UTC
From: fractenna@aol.com
Message-ID: <20040722062549.19243.00002034@mb-m04.aol.com>
Source record: 92110

The specs on combiners are always tough to figure out. What most people think of as 'insertion loss' is actually division loss. The1 to 2 splitter with 3.5 dB insertion loss probably claims 3 dB of division loss --and 0.5 dB dissipative loss.

Its very unlikely its 3.5 dB of dissipative insertion loss. Even cheap power dividers--which are split delay networks with chip resistors--tend to be better than 3 .5 dB of dissipative loss, when they work.

73,
Chip N1IR

640. TGM MQ 36SR deserves a try ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 11:05:00 UTC
From: Thierry <"Answer direct via http">
Message-ID: <40ff9f5c$1@news.vo.lu>
Source record: 92111

Hi,

I would like to buy a moderate size (as well at a moderate price) a multiband beam like a TGM MQ 36SR ($550, E811)

It gain is around 6 dBd, quite interesting with a F/B ratio quite interesting too.

Question.
This antenna being sold for over 8 years now (maybe more), if was probably used under various climate and working conditions.
Living in a temperate climate (LX and ON, with a lot of rain and snow) I would like to know if this is a good investment :
- if you experiment hardware problems
- servicing problems, etc,
- and if you have to make a new order, if you will order the same model, or never more ?

Thanks in advance

Thierry
ON4SKY, LX3SKY
http://www.astrosurf.com/lombry

641. Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 11:25:39 UTC
From: Thierry <"Answer direct via http">
Message-ID: <40ffa433$1@news.vo.lu>
Source record: 92112

Hi,

A question about the installtion of a short beam on a roof/chimney.

My house is built on top of Meuse valley, 250m high, surrounded with open field (and much wind, hi).

The roof top is at about 6m high. There is a small chimney 2m high. This part of the house contain only the garage and in front (garden side), the small boiler.
Here is the picture,
http://www.astrosurf.com/lombry/Radio/ant-longfil15m-eo3.jpg

I want to work mainly on bands of 20, 17 and 15m (and much less on 12 and 10, say 10% of time). So the antenna 'd be placed at 10m high and i can reach this height : I could place a small mast 3m high on the chimney attached with simple aluminium straps and screws, so the antenna will be at about 10m high. I hope it will be away from any interference with the boiler ignition system.

Question:
Is it important to place the beam much higher than the chimney (say at worst 10m higher that any building) or the main problem is the height over the ground of the house (I suspect the second) ?

At last, any experience with a TGM MQ 36SR at various heights is welcome (I read the eham reviews but there is not much accurate opinion in this regard, excepting that everybody does not share its good performances...)

PS. My alternative should be to place the antenna 5 m high over ground at the end of the garden (60m away), simply attached to the supporting wood wall of a small cottage ... :-(

73
Thierry
ON4SKY, LX3SKY
http://www.astrosurf.com/lombry

642. Re: Distance between outer ends of buried radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 11:31:37 UTC
From: sjbeyers@trianglenet.net
Message-ID: <72befaab.0407220331.10f28946@posting.google.com>
Source record: 92113

sjbeyers@trianglenet.net (Steve Beyers) wrote in message
news:<72befaab.0407200712.64b92d38@posting.google.com>...
> I remember reading somewhere that one way to determine the optimum
> number of buried radials for a vertical antenna is to use a specific
> value for the distance between the outer ends. (I'm not sure if this
> is the straight-line distance, or the length of a chord, but there
> wouldn't be much difference.) But I can't remember the value.
> Something like .05 wavelength rings a bell, but I'm not sure. Does
> anyone know what the value is and where I might have read it?
>
> Thanks -
>
> Steve W9HJW

I found the reference - it's in John Devolere's Low-Band DXing, 1999
edition, page 9-13. I recommends .015 wavelength between radial ends
for 1-4 wavelenth radials.

Steve W9HJW

643. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 11:32:18 UTC
From: Thierry <"Answer direct via http">
Message-ID: <40ffa5c2$1@news.vo.lu>
Source record: 92114

Hi Reg,

Very interesting opinion Reg and as usual your software are very useless
;-).
Here are some more commentaries
http://www.astrosurf.com/lombry/qsl-radials.htm

73
Thierry, ON4SKY

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cdmpp4rqa1@sparta.btinternet.com...
> Each individual radial is obviously a single-wire transmission line
buried
> in a lossy medium.
>
> As with all lines, it has Zo and attenuation, and when length is being
> considered its propagation velocity is of great importance.
>
> Due to the very high permittivity of water (80) and the water content of
all
> soils, rocks even, the velocity factor VF along a buried wire is much
> smaller than the free space value. Even when just resting on a slightly
damp
> soil surface the VF roughly falls to 0.5 which can be easily checked with
a
> hand-held antenna analyser. A 1/8-wavelength of wire behaves as a
> 1/4-wavelength when on the soil surface but with a poor Q.
>
> Soil permittivity K is tabled alongside soil resistivity (conductivity).
> Velocity in a transmission line is proportional to 1/Sqrt(K). So a
typical
> value of K of 14 results in a velocity factor of 1/Sqrt(14) = 0.267
i.e.,
> only 27 percent of the free space velocity.
>
> Attenuation along a buried wire is quite high. Typically it is 8 to 10 dB
> per 1/4 wavelength at its own velocity depending on soil composition.
>
> Therefore, not only is a buried radial VERY much shorter than its
free-space
> value, there's not a lot of current flowing in it near its end - and if
> there's little current flowing in it, it may just as well not be there.
>
> There is not much point in increasing length of radials beyond that when

> input impedance of the line is already Zo.
>
> The moral is - if you have any wire remaining after laying some short
> radials then don't use it to increase their length - increase their
number!
>
> For performance of radials in quantitative terms there are 4 programs
which
> may be of interest at my website.
>
> EARTHRES analyses DC and VLF performance of ground rods, plates, etc., and
> of a system of ground radials of any number and length.
>
> RADIOETH demonstrates behaviour versus length at VLF to HF of a single
> radial wire.
>
> ENDFEED and TANT136 integrate the calculations of the first two programs
by
> incorporating them in working models of inverted-L and T-antennas
> respectively.
>
> Remember the accuracy of performance predictions depends on how accurate
you
> know the soil resistivity and permittivity in the vicinity of your
antenna.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>
>
>
>

644. Re: Single chip magn loop RX antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 11:54:57 UTC
From: Jan Simons PA0SIM <PA0SIMdeletespam@amsat.org>
Message-ID: <1090497120.72431@SLIPstream>
Source record: 92115

"Eric Oyen - N7ZZT" <n7zzt@127.0.0.1> schreef in bericht
news:pan.2004.07.22.09.18.44.182997@127.0.0.1...
> On Wed, 21 Jul 2004 23:40:16 +0000, Richard Clark wrote:
>
> > On Wed, 21 Jul 2004 15:34:18 -0700, Eric Oyen - N7ZZT
> > <n7zzt@127.0.0.1> wrote:
> >
> >> [quoted text muted]
> >
> > Hi Eric,
> >
> > I got through when his post appeared, I got through when I read your
> > post above.
> >
> > 73's
> > Richard Clark, KB7QHC
> curious. must be a routing issue from here to there then.

Eric, there where indeed some local problems in PA-land around
that time. My provider told me that a few minutes ago.

73 de Jan PA0SIM

645. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 11:56:07 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <adadnT7AweXENmLdRVn-pw@cwis.net>
Source record: 92116

Thierry,
With a few precautions, I'd place the antenna on the chimney. The primary precaution is to make sure the chimney is constructed so as to be able to support the antenna and mast! Chimneys are not usually built to withstand very much stress from the sides, the antenna and mast will place higher than usual stress on the chimney because of they're wind resistance.
The effective height above ground will be slightly lower than the antenna's actual height because of the proximity to the structure. No idea what that effective height might be, and probably not a huge amount of difference from the actual height above ground. In general, the more height, the better the performance. A meter or two won't make ~that~ much difference either way, though.
I've no experience with your particular antenna so am no help there.
Good luck...
'Doc

646. Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 13:10:29 UTC
From: wolfee <clambrain@com.invalid>
Message-ID: <91PLc.122735$OB3.62667@bgtnsc05-news.ops.worldnet.att.net>
Source record: 92117

I just bought a new Sangean PRD2 radio. It has provision for an external antenna which I hooked up. There is also a terminal for a ground wire. Is it neccessary?

647. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 13:57:39 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <uu-dnXLO489PWmLdRVn-jg@comcast.com>
Source record: 92118

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:40ffa433$1@news.vo.lu...
> Hi,
>
> A question about the installtion of a short beam on a roof/chimney.
>
> My house is built on top of Meuse valley, 250m high, surrounded with open
> field (and much wind, hi).
>
> The roof top is at about 6m high. There is a small chimney 2m high. This
> part of the house contain only the garage and in front (garden side), the
> small boiler.
> Here is the picture,
> http://www.astrosurf.com/lombry/Radio/ant-longfil15m-eo3.jpg
>
> I want to work mainly on bands of 20, 17 and 15m (and much less on 12 and
> 10, say 10% of time). So the antenna 'd be placed at 10m high and i can
> reach this height : I could place a small mast 3m high on the chimney
> attached with simple aluminium straps and screws, so the antenna will be
at
> about 10m high. I hope it will be away from any interference with the
boiler
> ignition system.
>
> Question:
> Is it important to place the beam much higher than the chimney (say at
worst
> 10m higher that any building) or the main problem is the height over the
> ground of the house (I suspect the second) ?
>
> At last, any experience with a TGM MQ 36SR at various heights is welcome
(I
> read the eham reviews but there is not much accurate opinion in this
regard,
> excepting that everybody does not share its good performances...)
>
> PS. My alternative should be to place the antenna 5 m high over ground at
> the end of the garden (60m away), simply attached to the supporting wood
> wall of a small cottage ... :-(
>
> 73
> Thierry
> ON4SKY, LX3SKY
> http://www.astrosurf.com/lombry

>
>
Thierry,
I would go for the chimney. I presently have a 19 element 432 antenna and an HD73 rotor on the chimney with a 10 foot Al. mast. Just make sure the chimney is strong enough. I put the mast on one of the inside corners of the chimney, and the end of the mast is actually supported on the roof. This takes the dead weight off the chimney mounts, and makes for a longer moment arm. Also, put it on the more upwind side.

Tam/WB2TT

648. Re: Osama Found Hanged

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 14:35:23 UTC
From: arrow146@aol.com
Message-ID: <20040722103523.04711.00000206@mb-m21.aol.com>
Source record: 92119

```
<< Subject: Osama Found Hanged
From: frankjones@harvard.edu
Date: 22, Thursday July, 2004 6:39 AM
Message-id: <IsPLc.20333$pR5.18308@fe2.texas.rr.com>

Osama Bin Ladin was found hanged by two CNN journalists early Wedensday
evening. As evidence they took several photos, some of which i have included
here. As yet, this information has not hit the headlines due to Bush wanting
confirmation of his identity but the journalists have released some early
photos over the internet..
http://24.13.130.125:89/OsamaFoundDead.zip
>>

This is not a Photo, it is a ".exe" file.
Could be a Virus or Worm.
I do Not know, I am not going to open it.
Let Micky do it.

73 Al Lowe N0IMW
```

649. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 15:57:30 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <NtRLc.6133$_K2.483@lakeread02>
Source record: 92120

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
> Hi,
>
> A question about the installtion of a short beam on a roof/chimney.
>
> My house is built on top of Meuse valley, 250m high, surrounded with open
> field (and much wind, hi).
>
> The roof top is at about 6m high. There is a small chimney 2m high. This
> part of the house contain only the garage and in front (garden side), the
> small boiler.
> Here is the picture,
> http://www.astrosurf.com/lombry/Radio/ant-longfil15m-eo3.jpg
>
> I want to work mainly on bands of 20, 17 and 15m (and much less on 12 and
> 10, say 10% of time). So the antenna 'd be placed at 10m high and i can
> reach this height : I could place a small mast 3m high on the chimney
> attached with simple aluminium straps and screws, so the antenna will be
at
> about 10m high. I hope it will be away from any interference with the
boiler
> ignition system.
>
> Question:
> Is it important to place the beam much higher than the chimney (say at
worst
> 10m higher that any building) or the main problem is the height over the
> ground of the house (I suspect the second) ?
>
> At last, any experience with a TGM MQ 36SR at various heights is welcome
(I
> read the eham reviews but there is not much accurate opinion in this
regard,
> excepting that everybody does not share its good performances...)
>
> PS. My alternative should be to place the antenna 5 m high over ground at
> the end of the garden (60m away), simply attached to the supporting wood
> wall of a small cottage ... :-(
>
> 73
> Thierry
> ON4SKY, LX3SKY
> http://www.astrosurf.com/lombry
>

Thierry (http://astrosurf.com/lombry/post.htm):

in re: your proposed chimney-mounted antenna.

Be advised that carbon build-up from furnace, boiler, or fireplace operation is extremely conductive and can soon form a static connection between an antenna and the chimney-flue opening, and across various elements of the antenna also. This is to be avoided. One poster's advice to keep the antenna mount "upwind" was well said. Avoiding a chimney mount (on a working/operating flue) unless other options are not available is even better.

Best regards,

Jack Painter
Virginia Beach, VA

also posted to rec.radio.amateur.antenna

650. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 16:00:40 UTC
From: Thierry <"Answer direct via http">
Message-ID: <40ffe4aa@news.vo.lu>
Source record: 92171

"Jack Painter" <223bthp@cox.net> wrote in message
news:NtRLc.6133$_K2.483@lakeread02...
>
> "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
wrote
> > Hi,
>...
> Be advised that carbon build-up from furnace, boiler, or fireplace
operation
> is extremely conductive and can soon form a static connection between an
> antenna and the chimney-flue opening, and across various elements of the
> antenna also. This is to be avoided. One poster's advice to keep the
antenna
> mount "upwind" was well said. Avoiding a chimney mount (on a
> working/operating flue) unless other options are not available is even
> better.

I will not forget this advice !
Thanks

Thierry
>
> Best regards,
>
> Jack Painter
> Virginia Beach, VA
>
> also posted to rec.radio.amateur.antenna
>
>

651. Re: Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 16:07:54 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <uDRLc.6135$_K2.2220@lakeread02>
Source record: 92172

"wolfee" <clambrain@com.invalid> wrote

> I just bought a new Sangean PRD2 radio. It has provision for an external
> antenna which I hooked up. There is also a terminal for a ground wire.
Is
> it neccessary?
>

Probably not. A single wire antenna connected directly to a portable radio is going to exhibit the highest form of noise and static known to radio listening ;-) Grounding a portable radio is going to do very little to affect this, but it could help and certainly won't hurt to try. But ground it to what? Certainly not your house AC grounding system. If you are going to the trouble of making a ground rod connection available to your radio then why not also use a coax feedline and a matching (Balun) transformer according to the estimated impedance of your wire antenna? That way you can truly "ground" the shield of the coax at the Balun, and grounding the radio itself will have some purpose then.

Good luck,

Jack Painter
Virginia Beach, VA

652. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 20:10:40 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <kLGdnQQ9sIjfgp3cRVn-pQ@comcast.com>
Source record: 92173

"Jack Painter" <223bthp@cox.net> wrote in message
news:NtRLc.6133$_K2.483@lakeread02...
>
> "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
wrote
> > Hi,
> >
> > A question about the installtion of a short beam on a roof/chimney.
> >
> > My house is built on top of Meuse valley, 250m high, surrounded with
open
> > field (and much wind, hi).
> >
> > The roof top is at about 6m high. There is a small chimney 2m high. This
> > part of the house contain only the garage and in front (garden side),
the
> > small boiler.
> > Here is the picture,
> > http://www.astrosurf.com/lombry/Radio/ant-longfil15m-eo3.jpg
> >
> > I want to work mainly on bands of 20, 17 and 15m (and much less on 12
and
> > 10, say 10% of time). So the antenna 'd be placed at 10m high and i can
> > reach this height : I could place a small mast 3m high on the chimney
> > attached with simple aluminium straps and screws, so the antenna will be
> at
> > about 10m high. I hope it will be away from any interference with the
> boiler
> > ignition system.
> >
> > Question:
> > Is it important to place the beam much higher than the chimney (say at
> worst
> > 10m higher that any building) or the main problem is the height over the
> > ground of the house (I suspect the second) ?
> >
> > At last, any experience with a TGM MQ 36SR at various heights is welcome
> (I
> > read the eham reviews but there is not much accurate opinion in this
> regard,
> > excepting that everybody does not share its good performances...)
> >
> > PS. My alternative should be to place the antenna 5 m high over ground
at

> > the end of the garden (60m away), simply attached to the supporting wood
> > wall of a small cottage ... :-(
> >
> > 73
> > Thierry
> > ON4SKY, LX3SKY
> > http://www.astrosurf.com/lombry
> >
>
> Thierry (http://astrosurf.com/lombry/post.htm):
>
> in re: your proposed chimney-mounted antenna.
>
> Be advised that carbon build-up from furnace, boiler, or fireplace
operation
> is extremely conductive and can soon form a static connection between an
> antenna and the chimney-flue opening, and across various elements of the
> antenna also. This is to be avoided. One poster's advice to keep the
antenna
> mount "upwind" was well said. Avoiding a chimney mount (on a
> working/operating flue) unless other options are not available is even
> better.
>
> Best regards,
>
> Jack Painter
> Virginia Beach, VA
>
> also posted to rec.radio.amateur.antenna
>
>
Jack,
Like you say, fireplaces are bad. I think a gas furnace is a noop. The
previous owner of this house had a TV antenna on a chimney mount for
something like 8 - 10 years. When I took it down I saw no signs of any
corrosion, except possibly to the end of the wire.

Tam/WB2TT

653. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 22:47:00 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <FtXLc.6238$_K2.5275@lakeread02>
Source record: 92174

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote

> "Jack Painter" <223bthp@cox.net> wrote in message
> news:NtRLc.6133$_K2.483@lakeread02...
> >
> > "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
> wrote
> > > Hi,
> > >
> > > A question about the installtion of a short beam on a roof/chimney.
> > >
> > > My house is built on top of Meuse valley, 250m high, surrounded with
> open
> > > field (and much wind, hi).
> > >
> > > The roof top is at about 6m high. There is a small chimney 2m high.
This
> > > part of the house contain only the garage and in front (garden side),
> the
> > > small boiler.
> > > Here is the picture,
> > > http://www.astrosurf.com/lombry/Radio/ant-longfil15m-eo3.jpg
> > >
> > > I want to work mainly on bands of 20, 17 and 15m (and much less on 12
> and
> > > 10, say 10% of time). So the antenna 'd be placed at 10m high and i
can
> > > reach this height : I could place a small mast 3m high on the chimney
> > > attached with simple aluminium straps and screws, so the antenna will
be
> > at
> > > about 10m high. I hope it will be away from any interference with the
> > boiler
> > > ignition system.
> > >
> > > Question:
> > > Is it important to place the beam much higher than the chimney (say at
> > worst
> > > 10m higher that any building) or the main problem is the height over
the
> > > ground of the house (I suspect the second) ?
> > >
> > > At last, any experience with a TGM MQ 36SR at various heights is
welcome

> > (I
> > > read the eham reviews but there is not much accurate opinion in this
> > regard,
> > > excepting that everybody does not share its good performances...)
> > >
> > > PS. My alternative should be to place the antenna 5 m high over ground
> at
> > > the end of the garden (60m away), simply attached to the supporting
wood
> > > wall of a small cottage ... :-(
> > >
> > > 73
> > > Thierry
> > > ON4SKY, LX3SKY
> > > http://www.astrosurf.com/lombry
> > >
> >
> > Thierry (http://astrosurf.com/lombry/post.htm):
> >
> > in re: your proposed chimney-mounted antenna.
> >
> > Be advised that carbon build-up from furnace, boiler, or fireplace
> operation
> > is extremely conductive and can soon form a static connection between an
> > antenna and the chimney-flue opening, and across various elements of the
> > antenna also. This is to be avoided. One poster's advice to keep the
> antenna
> > mount "upwind" was well said. Avoiding a chimney mount (on a
> > working/operating flue) unless other options are not available is even
> > better.
> >
> > Best regards,
> >
> > Jack Painter
> > Virginia Beach, VA
> >
> > also posted to rec.radio.amateur.antenna
> >
> >
> Jack,
> Like you say, fireplaces are bad. I think a gas furnace is a noop. The
> previous owner of this house had a TV antenna on a chimney mount for
> something like 8 - 10 years. When I took it down I saw no signs of any
> corrosion, except possibly to the end of the wire.
>
> Tam/WB2TT
>

Tam, good point. The flue gasses are corrosive even from natural gas, but
carbon would not be an issue there. Oil burning furnaces and fireplace usage

is where the carbon comes from, and the worst would be from wood burning in a fireplace.

Jack

654. Re: Osama Found Hanged

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-22 22:48:52 UTC
From: Ken B <kenbern@hotmail.com>
Message-ID: <MPG.1b69e413a3788fe989697@netnews.comcast.net>
Source record: 92175

In article <20040722103523.04711.00000206@mb-m21.aol.com>, arrow146
@aol.com says...
> << Subject: Osama Found Hanged
> From: frankjones@harvard.edu
> Date: 22, Thursday July, 2004 6:39 AM
> Message-id: <IsPLc.20333$pR5.18308@fe2.texas.rr.com>
>
> Osama Bin Ladin was found hanged by two CNN journalists early Wedensday
> evening. As evidence they took several photos, some of which i have included
> here. As yet, this information has not hit the headlines due to Bush wanting
> confirmation of his identity but the journalists have released some early
> photos over the internet..
> http://24.13.130.125:89/OsamaFoundDead.zip
> >>
>
>
> This is not a Photo, it is a ".exe" file.
> Could be a Virus or Worm.
> I do Not know, I am not going to open it.
> Let Micky do it.
>
> 73 Al Lowe N0IMW
>
Mickey did it, and now regrets it.

I never (except this time) open this kind of stuff. Well it contains
two harmony trojans. One puts ipconfigS.exe in your windows\system
(system32) directory and 2 registry entries. The other puts
zoneLockup.exe in the same directory and 1 registry entry. My anti-
virus program did not catch it, nor did PestPatrol or Adaware 6.0.
McAfee Freescan finds it but of course you have to buy the program to
get rid of it. I did a web search and found instructions about where it
was installed and removed the components. Note that the .exe programs
don't want to delete (access denied) so I used a program Move/delete on
boot GiPo@utilities, free for the old version.

http://gibinsoft.net/

You've been warned! I learned my lesson, I hope.

KA7RGO

655. Re: Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 00:15:06 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10g0m4cmfvm9043@corp.supernews.com>
Source record: 92176

My God Jack. A ground wire will help with external antenna. Water pipe (metal ones) are nice, three feet of copper tubing pounded in the ground and connected to the ground lug, jack, clip, or whatever the connection is on the radio is all he needs. I doubt he will get a 40 db gain, but what the hell, he is only looking for as much signal improvement as he can possibly get without spending 5-6 grand for a tower and a log periodic that covers dc-daylight. Whats with this coax crap and balun wound to the frequency of the wire? You don't think he may want to change bands and freqs without running out to the "war and rewind the balun: an inexpensive mfj tuner between radio and antenna will do wonders. Why can't hams be elmers anymore instead of cryptic a-holes to the new guys?

Butch Magee KF5DE

Jack Painter wrote:
> "wolfee" <clambrain@com.invalid> wrote
>
>
>>I just bought a new Sangean PRD2 radio. It has provision for an external
>>antenna which I hooked up. There is also a terminal for a ground wire.
>
> Is
>
>>it neccessary?
>>
>
>
> Probably not. A single wire antenna connected directly to a portable radio
> is going to exhibit the highest form of noise and static known to radio
> listening ;-) Grounding a portable radio is going to do very little to
> affect this, but it could help and certainly won't hurt to try. But ground
> it to what? Certainly not your house AC grounding system. If you are going
> to the trouble of making a ground rod connection available to your radio
> then why not also use a coax feedline and a matching (Balun) transformer
> according to the estimated impedance of your wire antenna? That way you can
> truly "ground" the shield of the coax at the Balun, and grounding the radio
> itself will have some purpose then.
>
> Good luck,
>
> Jack Painter
> Virginia Beach, VA
>
>

656. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 00:22:25 UTC
From: JOE <joeHATESspam@hotmail.com>
Message-ID: <ae8539d0527f8f7a842cbd466a432c10@news.meganetnews.com>
Source record: 92177

> Manual for this radio is very good but it is not a troubleshooting guide.
> What did you say your call was .

SnookerMama - monitoring channel 38 L, with echo and roger beep,
pushing 500 watts mobile in the CW segment of 10 while trucking
across the panhandle.

657. Re: Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 01:15:51 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <cFZLc.6324$_K2.949@lakeread02>
Source record: 92178

"Butch" <lynyrd@cableone.net> wrote in message
news:10g0m4cmfvm9043@corp.supernews.com...
> My God Jack. A ground wire will help with external antenna. Water pipe
> (metal ones) are nice, three feet of copper tubing pounded in the
> ground and connected to the ground lug, jack, clip, or whatever the
> connection is on the radio is all he needs. I doubt he will get a 40 db
> gain, but what the hell, he is only looking for as much signal
> improvement as he can possibly get without spending 5-6 grand for a
> tower and a log periodic that covers dc-daylight. Whats with this coax
> crap and balun wound to the frequency of the wire? You don't think he
> may want to change bands and freqs without running out to the "war and
> rewind the balun: an inexpensive mfj tuner between radio and antenna
> will do wonders. Why can't hams be elmers anymore instead of cryptic
> a-holes to the new guys?
>
> Butch Magee KF5DE

ok Butch, point taken - didn't mean to be cryptic. I chatted with this friendly fella offline and will always offer to help anytime I can. This hobby has been very good to me. After almost 10 years of military-scanning (while in the Navy), I listened to my first HF via a Grundig YB PE400 - and was hooked ever since. I even connected it to rooftop discones (lol, but it did work) and I soon realized that little radio could copy Atlantic Ocean search and rescue comms the USCG was missing. Six years after that I now operate a coastal station from my home, handling cutters, aircraft & SAR up to 3,000 miles way. So I'm reminded of what can start from a little HF-portable with wire around the windows (and no ground)!

73, Jack

>
>
> Jack Painter wrote:
> > "wolfee" <clambrain@com.invalid> wrote
> >
> >
> >>I just bought a new Sangean PRD2 radio. It has provision for an
external
> >>antenna which I hooked up. There is also a terminal for a ground wire.
> >
> > Is
> >
> >>it neccessary?
> >>
> >

> >
> > Probably not. A single wire antenna connected directly to a portable
radio
> > is going to exhibit the highest form of noise and static known to radio
> > listening ;-) Grounding a portable radio is going to do very little
to
> > affect this, but it could help and certainly won't hurt to try. But
ground
> > it to what? Certainly not your house AC grounding system. If you are
going
> > to the trouble of making a ground rod connection available to your radio
> > then why not also use a coax feedline and a matching (Balun) transformer
> > according to the estimated impedance of your wire antenna? That way you
can
> > truly "ground" the shield of the coax at the Balun, and grounding the
radio
> > itself will have some purpose then.
> >
> > Good luck,
> >
> > Jack Painter
> > Virginia Beach, VA
> >
> >
>

658. Re: Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 01:20:13 UTC
From: Fleck <Fleck@AntIsland.net>
Message-ID: <28-dnc8AYpJl-p3cRVn-hg@comcast.com>
Source record: 92179

You want a duplexer. Here's a link to the Comet products.

http://www.cometantenna.com/products.php?CatID=1&famID=6&childID=0

659. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 10:28:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cdqp82$oa3$1@hercules.btinternet.com>
Source record: 92180

"Thierry" wrote -
> Hi Reg,
>
> Very interesting opinion Reg and as usual your software are very useless
> ;-).

Not opinion but facts. Which do not disagree with the more enlightened of
the old wives.

Even lightning conductors are more accurately represented as transmission
lines.

Reg.

660. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 13:49:04 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <sm52g095olpd2cfnrs1b4s941tqh8bnph0@4ax.com>
Source record: 92181

On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
http://www.astrosurf.com/lombry/post.htm> wrote:

|Hi Reg,
|
|Very interesting opinion Reg and as usual your software are very useless
|;-).

And then speaking of useless adds:

|Here are some more commentaries
|http://www.astrosurf.com/lombry/qsl-radials.htm

Which is best summarized in his own words, "Lost in a dense fog... "

661. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 15:17:45 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <6ga2g018oels0bj211gg7vga0qst0c2odk@4ax.com>
Source record: 92182

On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:

>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
>http://www.astrosurf.com/lombry/post.htm> wrote:
>
>|Hi Reg,
>|
>|Very interesting opinion Reg and as usual your software are very useless
>|;-).
>
>And then speaking of useless adds:
>
>|Here are some more commentaries
>|http://www.astrosurf.com/lombry/qsl-radials.htm
>
>Which is best summarized in his own words, "Lost in a dense fog... "

Wes, that guy Lombry is totally QAZ, which has long been the Q signal for 'lost
in a dense fog between two layers of thick clouds'.

Walt
>

662. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 15:18:05 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <ova2g09294c3gcjvd7e76u6s9hpdeb4ps8@4ax.com>
Source record: 92183

On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:

>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
>http://www.astrosurf.com/lombry/post.htm> wrote:
>
>|Hi Reg,
>|
>|Very interesting opinion Reg and as usual your software are very useless
>|;-).
>
>And then speaking of useless adds:
>
>|Here are some more commentaries
>|http://www.astrosurf.com/lombry/qsl-radials.htm
>
>Which is best summarized in his own words, "Lost in a dense fog... "
>

663. Re: Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 15:25:12 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41012DD8.8000105@psu.edu>
Source record: 92184

That was a little over the top, wasn't it? One of the problems in here is that a newbie can get scared off *really quick* by some of the answers they get.

My advice to Wolfee would be three things. Put a wire out the window, and see what happens. There will probably be some improvement, and you can have a little fun by experimenting with the length. Use the ground. Ground it to a water pipe or if you can, to a rod stuck in the ground. You can even try a counterpoise long wire on the ground terminal instead of grounding it. Have a two wire setup.

Some of these things will work okay, some may not. But have fun experimenting!

Butch wrote:
> My God Jack. A ground wire will help with external antenna. Water pipe
> (metal ones) are nice, three feet of copper tubing pounded in the
> ground and connected to the ground lug, jack, clip, or whatever the
> connection is on the radio is all he needs. I doubt he will get a 40 db
> gain, but what the hell, he is only looking for as much signal
> improvement as he can possibly get without spending 5-6 grand for a
> tower and a log periodic that covers dc-daylight. Whats with this coax
> crap and balun wound to the frequency of the wire? You don't think he
> may want to change bands and freqs without running out to the "war and
> rewind the balun: an inexpensive mfj tuner between radio and antenna
> will do wonders. Why can't hams be elmers anymore instead of cryptic
> a-holes to the new guys?
>
> Butch Magee KF5DE
>
>
> Jack Painter wrote:
>
>> "wolfee" <clambrain@com.invalid> wrote
>>
>>
>>> I just bought a new Sangean PRD2 radio. It has provision for an external
>>> antenna which I hooked up. There is also a terminal for a ground wire.
>>
>>
>> Is
>>
>>> it neccessary?
>>>
>>

>>
>> Probably not. A single wire antenna connected directly to a portable radio
>> is going to exhibit the highest form of noise and static known to radio
>> listening ;-) Grounding a portable radio is going to do very little to
>> affect this, but it could help and certainly won't hurt to try. But ground
>> it to what? Certainly not your house AC grounding system. If you are going
>> to the trouble of making a ground rod connection available to your radio
>> then why not also use a coax feedline and a matching (Balun) transformer
>> according to the estimated impedance of your wire antenna? That way
>> you can
>> truly "ground" the shield of the coax at the Balun, and grounding the
>> radio
>> itself will have some purpose then.
>>
>> Good luck,
>>
>> Jack Painter
>> Virginia Beach, VA
>>
>>
>

664. Re: Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 15:28:28 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41012E9C.3020905@psu.edu>
Source record: 92185

Jack Painter wrote:
> "Butch" <lynyrd@cableone.net> wrote in message
> news:10g0m4cmfvm9043@corp.supernews.com...
>
>>My God Jack. A ground wire will help with external antenna. Water pipe
>> (metal ones) are nice, three feet of copper tubing pounded in the
>>ground and connected to the ground lug, jack, clip, or whatever the
>>connection is on the radio is all he needs. I doubt he will get a 40 db
>>gain, but what the hell, he is only looking for as much signal
>>improvement as he can possibly get without spending 5-6 grand for a
>>tower and a log periodic that covers dc-daylight. Whats with this coax
>>crap and balun wound to the frequency of the wire? You don't think he
>>may want to change bands and freqs without running out to the "war and
>>rewind the balun: an inexpensive mfj tuner between radio and antenna
>>will do wonders. Why can't hams be elmers anymore instead of cryptic
>>a-holes to the new guys?
>>
>>Butch Magee KF5DE
>
>
> ok Butch, point taken - didn't mean to be cryptic. I chatted with this
> friendly fella offline and will always offer to help anytime I can. This
> hobby has been very good to me. After almost 10 years of military-scanning
> (while in the Navy), I listened to my first HF via a Grundig YB PE400 - and
> was hooked ever since. I even connected it to rooftop discones (lol, but it
> did work) and I soon realized that little radio could copy Atlantic Ocean
> search and rescue comms the USCG was missing. Six years after that I now
> operate a coastal station from my home, handling cutters, aircraft & SAR up
> to 3,000 miles way. So I'm reminded of what can start from a little
> HF-portable with wire around the windows (and no ground)!

Well there ya go! the new guy should be off and running soon, let's
hope he experiments and catches the bug.

- Mike KB3EIA -

665. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 15:31:52 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41012F68.5010600@psu.edu>
Source record: 92186

JOE wrote:
>>Manual for this radio is very good but it is not a troubleshooting guide.
>>What did you say your call was .
>
>
> SnookerMama - monitoring channel 38 L, with echo and roger beep,
> pushing 500 watts mobile in the CW segment of 10 while trucking
> across the panhandle.

You know guys. Maybe this guy isn't a ham. Wouldn't it be better to tell him he shouldn't transmit if he isn't, and then point him to advice on becoming one?

This kind of stuff ain't exactly the welcome wagon. Makes a fellow feel right welcome - not.

- Mike KB3EIA -

666. power pole as a coil form for 160meters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 17:14:40 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <4IbMc.56215$IX4.7440990@twister.tampabay.rr.com>
Source record: 92187

hello all
i have a power pole in my yard no linger used by power company and cut
down to 10 feet tall
what i am thinking of doing is to make this pole a monster sized
hamstick type of thing
use the pole as a coil form then put a radiator up top
so do you all think of this will it work will be it an efficent antenna
and how many turns of #12ga wire would it take?
thanks

667. Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 17:21:20 UTC
From: Kent <kwinrich@wi.rr.com>
Message-ID: <INbMc.33583$6t1.19197@twister.rdc-kc.rr.com>
Source record: 92188

I am working with a client that needs to have directional yagis, pointed 180 from each other, for a cell phone repeater.

I was thinking about using 1/2 wave lines and putting them into a "TEE".

Any suggestions?

THANKS!

Kent
K9EZ

668. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 19:40:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7en2g0pu00n3gricb2kc5gaq3kkto8hhr7@4ax.com>
Source record: 92189

On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
>
>>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
>>http://www.astrosurf.com/lombry/post.htm> wrote:
>>
>>|Hi Reg,
>>|
>>|Very interesting opinion Reg and as usual your software are very useless
>>|;-).
>>
>>And then speaking of useless adds:
>>
>>|Here are some more commentaries
>>|http://www.astrosurf.com/lombry/qsl-radials.htm
>>
>>Which is best summarized in his own words, "Lost in a dense fog... "
>
>Wes, that guy Lombry is totally QAZ, which has long been the Q signal for 'lost
>in a dense fog between two layers of thick clouds'.
>
>Walt
>>

Hello All,

I see a strange offhand way of responding to either Thierry's
criticism of Reg (which is pointed but accurate) or his own offering
of ground at his web pages, as containing no actual response to his
topics.

Reg offers us vanity software that is wholly useless by his own
admission:
"Remember the accuracy of performance predictions depends on how
accurate you know the soil resistivity and permittivity in the
vicinity of your antenna."

Even Thierry is savvy enough to have read Reg's scribblings that such
information is largely impossible to obtain except at the surface's
thin veneer - which is immediately confounded by RF penetration
(however meager) thus plunging knowledge into ignorance once again.
As such, this software by abstraction, and Reg in his usual temper,
mocks any attempt to be useful.

And this leads us to Thierry's own efforts at the pages offered. In a moderate scan of its content, I find it is composed from several references: ARRL, RSGB, FCC, and rraa. Oddly enough, fairly the same sources used here. I further note that Thierry has not invented any new physics to explain anything, there are few imaginings that would pass as dreams in the night. In fact, his coverage is commonplaces assembled into a coherent topic that does little to wander off into arcane math or the mysticism of calibrating mud.

Frankly, I find that Thierry has posed questions and taken advice in this forum and turned it into product at his web site in an effort that is truly in the spirit of Ham radio. I have further noted over a span of time, that Thierry's work has evolved and improved as he has studied the subject. If there is any criticism of his work, it would be best served to respond to specific issues and realize that in the long run error will find its way back to its source - HERE.

73's
Richard Clark, KB7QHC

669. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 20:20:02 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <jg88t1-2l7.ln1@p400bob.lse.com.au>
Source record: 92190

Hi Kent

Very workable. Odd multiples of 75 ohm coax to the antennas with a T connection at/near the phone.

There are also power splitters/combiners available for phasing antennas available. Will be more expensive though.

Personally since you are talking 180 degrees, I'd put together a bidirectional antenna though. The possibilities are endless here!

Cheers Bob VK2YQA

Kent wrote:
> I am working with a client that needs to have directional yagis, pointed 180
> from each other, for a cell phone repeater.
>
> I was thinking about using 1/2 wave lines and putting them into a "TEE".
>
> Any suggestions?
>
> THANKS!
>
> Kent
> K9EZ
>
>

670. Re: power pole as a coil form for 160meters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 21:34:52 UTC
From: jgboyles@aol.com
Message-ID: <20040723173452.15036.00000271@mb-m02.aol.com>
Source record: 92191

>i have a power pole in my yard no linger used by power company and cut
>down to 10 feet tall
>what i am thinking of doing is to make this pole a monster sized
>hamstick type of thing
>use the pole as a coil form then put a radiator up top

>how many turns of #12ga wire would it take?
>thanks

Hi Dennis, any thing will work, just not too well. The problem as I see it is with a 10' coil form about 1' diameter filled up with #12 wire is the self resonant frequency will be below 160 meters. This will make it not work as a loading coil. Of course if you made the coil self resonant on 160 meters it would not exhibit reactance, and you could load it, but it would be lossy with low efficiency.
To get any kind of efficiency on 160 the radiator has to be long, the loading coil large and hi-Q. Also need a good ground system. Maybe you could wind enough wire in the pole so that self resonance was double 1.8 mhz, add a stinger or top radiator and some top loading to bring the resonant freq. to 1.8mhz and see what that would do. Still not very efficient, even with a good ground.

73 Gary N4AST

671. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 21:47:32 UTC
From: Richard <translations@qdnet.pl>
Message-ID: <cds1bb$p4q$1@nemesis.news.tpi.pl>
Source record: 92192

I agree, I have seen Thierry's pages and think his is a "solid" bloke

Richard SO5GB
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7en2g0pu00n3gricb2kc5gaq3kkto8hhr7@4ax.com...
> On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
> >On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
> >
> >>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
> >>http://www.astrosurf.com/lombry/post.htm> wrote:
> >>
> >>|Hi Reg,
> >>|
> >>|Very interesting opinion Reg and as usual your software are very
useless
> >>|;-).
> >>
> >>And then speaking of useless adds:
> >>
> >>|Here are some more commentaries
> >>|http://www.astrosurf.com/lombry/qsl-radials.htm
> >>
> >>Which is best summarized in his own words, "Lost in a dense fog... "
> >
> >Wes, that guy Lombry is totally QAZ, which has long been the Q signal for
'lost
> >in a dense fog between two layers of thick clouds'.
> >
> >Walt
> >>
>
> Hello All,
>
> I see a strange offhand way of responding to either Thierry's
> criticism of Reg (which is pointed but accurate) or his own offering
> of ground at his web pages, as containing no actual response to his
> topics.
>
> Reg offers us vanity software that is wholly useless by his own
> admission:
> "Remember the accuracy of performance predictions depends on how
> accurate you know the soil resistivity and permittivity in the
> vicinity of your antenna."

>
> Even Thierry is savvy enough to have read Reg's scribblings that such
> information is largely impossible to obtain except at the surface's
> thin veneer - which is immediately confounded by RF penetration
> (however meager) thus plunging knowledge into ignorance once again.
> As such, this software by abstraction, and Reg in his usual temper,
> mocks any attempt to be useful.
>
> And this leads us to Thierry's own efforts at the pages offered. In a
> moderate scan of its content, I find it is composed from several
> references: ARRL, RSGB, FCC, and rraa. Oddly enough, fairly the same
> sources used here. I further note that Thierry has not invented any
> new physics to explain anything, there are few imaginings that would
> pass as dreams in the night. In fact, his coverage is commonplaces
> assembled into a coherent topic that does little to wander off into
> arcane math or the mysticism of calibrating mud.
>
> Frankly, I find that Thierry has posed questions and taken advice in
> this forum and turned it into product at his web site in an effort
> that is truly in the spirit of Ham radio. I have further noted over a
> span of time, that Thierry's work has evolved and improved as he has
> studied the subject. If there is any criticism of his work, it would
> be best served to respond to specific issues and realize that in the
> long run error will find its way back to its source - HERE.
>
> 73's
> Richard Clark, KB7QHC

672. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 21:49:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cds162$p7v$1@hercules.btinternet.com>
Source record: 92193

No-one will disagree that the efficiency of a vertical antenna is very simply Rin/(Rin+Rgrnd),

where Rin is the resistive component of antenna input impedance and Rgrnd is the resistive component of the ground electrode input impedance. The same current flows into each regardless of phase angles.

These measurements take into account the whole of the near field of the antenna and exclude the far or radiation field. Any small, if any, improvement due to extemely long radials MUST be considered to be within the far field with which we are not presently concerned. They play no part in antenna radiating efficiency which is a self-contained parameter.

The measurement of interest is the ground system input impedance such as at the focal point of a system of radial wires.

It should be perfectly obvious (except to some old wives) that radial wires are lossy transmission lines and as their length increases the input impedance tends to decrease. As with all lines the input impedance eventually converges on Zo.

With a lossy line, i.e., high attenuation, Zin converges on Zo fairly rapidly. Having converged on Zo any further increase in line length results in no further change in input impedance.

If there's no further change in input impedance (or the resistive component thereof) there can be no further improvement in antenna radiating efficiency. Thus we now have a practical limit to the useful length of a set of radial wires - or just one wire treated as a counterpoise. (A ground rod is just another short, thick wire.)

The situation is calculable. It is necessary first to find the attenuation and phase delay (or velocity factor) along the line at the lowest frequency of interest.

There is no point in having buried radials any longer than about 10 dB because the input impedance at that distance is within 10 percent of Zo or better. Or there could be some other calculable rule of thumb which would keep Lord Kelvin happy.

Having set a maximum on the length of radials the actual ground loss resistance depends on their number. And ultimately, of course, on soil resistivity and permittivity which involves some unavoidable guesswork. But that's quite normal when it comes to laying radials.

Or indeed to all other sorts of antenna predictions involving the ground and other obstructions, no matter to how many milli-bels the calculations may

have been computed to. Radio is by far the most inexact of ALL the engineering sciences.

But after all said and done - it does work! Even EH.

Reg, G4FGQ

673. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 22:28:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cds3dt$ek8$1@titan.btinternet.com>
Source record: 92194

Richard,

Congratulations!

Your abuse of the English language now exceeds that of the CIA in their description of non-existent weapons of mass destruction. ;o)

Yours, Punchinello.

674. Re: Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 22:38:47 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <0dhZkGP3NZABFwIh@g3ohx.demon.co.uk>
Source record: 92195

In message <28-dnc8AYpJl-p3cRVn-hg@comcast.com>, Fleck
<Fleck@AntIsland.net> writes
>You want a duplexer. Here's a link to the Comet products.
>
>http://www.cometantenna.com/products.php?CatID=1&famID=6&childID=0
>
>

Don't use a wideband combiner. Use a VHF/UHF diplexer. It's not because the diplexer has lower loss than the combiner. It's primarily to prevent the possibility of ghosting.

A VHF antenna can pick up the (unwanted) UHF signal from all sorts of directions (albeit somewhat inefficiently). The UHF antenna will receive the (wanted) UHF signal only from the direction in which it is pointing. The VHF antenna could pick up the same UHF signal bouncing off a hill, a building, or anything else. This unwanted reflected UHF signal will arrive later than the wanted signal received on the UHF antenna, resulting in a ghost to the right of the main picture.

Incidentally, the same argument is probably not quite so true 'the other way round', ie where a VHF signal picked up on a UHF antenna causes a ghost on a VHF signal. The UHF antenna WILL pick up a weak VHF signal, but only from the direction in which it is pointing or pointing away from, and not from other directions. Assuming that the two antennas are pointing in the same direction, the VHF signal received on both antennas will arrive at the same time, and you won't see any ghost (no matter how strong it is). However, this is all rather academic, because you have decided to use a diplexer!

Cheers,
Ian.
--

675. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 22:48:55 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <4f33g0l65l9jaevfnjvh2vrmcc48oeci4h@4ax.com>
Source record: 92196

On Fri, 23 Jul 2004 19:40:50 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

I'll take this bait.

|On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
|
|>On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
|>
|>>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
|>>http://www.astrosurf.com/lombry/post.htm> wrote:
|>>
|>>|Hi Reg,
|>>|
|>>|Very interesting opinion Reg and as usual your software are very useless
|>>|;-).

Note the "as usual", which I take to mean that the totality of Reg's
software is useless. This is bullshit.

This is from a guy who used to get his panties all bunched up (I don't
know how to translate the idiom to French) because the SWL QSLs he
received weren't all four-color with free money taped to the
"obverse."

You may disagree with Reg on a personal level, but many of his
programs are quite useful and entirely adequate for ham use and don't
suffer from the bloat that passes for software these days.

|
|Hello All,
|
|I see a strange offhand way of responding to either Thierry's
|criticism of Reg (which is pointed but accurate) or his own offering
|of ground at his web pages, as containing no actual response to his
|topics.

Sorry, I'll be more to the point [g].

|
|Reg offers us vanity software that is wholly useless by his own
|admission:
| "Remember the accuracy of performance predictions depends on how
| accurate you know the soil resistivity and permittivity in the
| vicinity of your antenna."

So? NEC-4 requires similar knowledge.

|
|Even Thierry is savvy enough to have read Reg's scribblings that such
|information is largely impossible to obtain except at the surface's
|thin veneer - which is immediately confounded by RF penetration
|(however meager) thus plunging knowledge into ignorance once again.
|As such, this software by abstraction, and Reg in his usual temper,
|mocks any attempt to be useful.
|
|And this leads us to Thierry's own efforts at the pages offered. In a
|moderate scan of its content, I find it is composed from several
|references: ARRL, RSGB, FCC, and rraa. Oddly enough, fairly the same
|sources used here. I further note that Thierry has not invented any
|new physics to explain anything, there are few imaginings that would
|pass as dreams in the night. In fact, his coverage is commonplaces
|assembled into a coherent topic that does little to wander off into
|arcane math or the mysticism of calibrating mud.

After my moderate scan here is one example of "coherence" chosen at
random by throwing a dart at my computer screen:

Quote:

"However, at radio frequencies the feeder having an appreciable length
compared with the working wavelength, it will also radiate power as
the antenna. Our objective is thus to minimize the unwanted radiation
from the feeder, in order to transfer as much power as possible to the
antenna with the less losses as possible.

However, without care the power lost by radiation in the transmission
line can be much higher than the resistance of conductors and
dielectrics. If we cannot always prevent power loss, we can easily
avoid loss by radiation."

End quote

ref: http://www.astrosurf.com/lombry/qsl-transmission-line.htm

|
|Frankly, I find that Thierry has posed questions and taken advice in
|this forum and turned it into product at his web site in an effort
|that is truly in the spirit of Ham radio. I have further noted over a
|span of time, that Thierry's work has evolved and improved as he has
|studied the subject. If there is any criticism of his work, it would
|be best served to respond to specific issues and realize that in the
|long run error will find its way back to its source - HERE.

You got it.

Quote:

"A perfect theoretical line shows no resistance. However we know that
all electrical circuits apply the Ohm's Law... That means that at
radio frequencies all circuits display some resistance, that mainly
depends on the input voltage."

End quote.

op cit

So maybe if Thierry apologizes to Reg, Reg will write him a program to do Ohm's law stuff.

Warmest regards,

Wes

676. Re: power pole as a coil form for 160meters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 22:59:48 UTC
From: j999w@aol.com
Message-ID: <20040723185948.07359.00000300@mb-m15.aol.com>
Source record: 92197

Yup ... of what I understand, you'll get better results top loading it and putting in a good ground. How about using the pole as a sturdy base for a tilt over mast rather than a coil?

jw
k9rzz

677. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 23:03:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f563g0ds32qjeok89hdrjd2m2jctens3au@4ax.com>
Source record: 92198

On Fri, 23 Jul 2004 21:49:54 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>There is no point in having buried radials any longer than about 10 dB

Well, it LOOKS like English at least. ;-)

One wonders about the software behind this jewel - it LOOKS like
Pascal perhaps.

678. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-23 23:13:01 UTC
From: tdonaly@aol.com
Message-ID: <20040723191301.14991.00000303@mb-m02.aol.com>
Source record: 92199

```
Wes wrote,
>
>I'll take this bait.
>
>|On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
>|
>|>On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
>|>
>|>>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
>|>>http://www.astrosurf.com/lombry/post.htm> wrote:
>|>>
>|>>|Hi Reg,
>|>>|
>|>>|Very interesting opinion Reg and as usual your software are very useless
>|>>|;-).
>
>Note the "as usual", which I take to mean that the totality of Reg's
>software is useless. This is bullshit.
>

It may be that the word Thierry meant to write was "useful", not "useless."
73,
Tom Donaly, KA6RUH
```

679. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 00:41:31 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4101b03c$0$74187$39cecf19@news.twtelecom.net>
Source record: 92200

I have to say I'm all excited to see which one gets in the last statement.

That's who wins here, you know.

I'm betting on Richard, not often helpful, but very persistent.

tom
K0TAR

>
>
>
> It may be that the word Thierry meant to write was "useful", not "useless."
> 73,
> Tom Donaly, KA6RUH
>
>

680. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 01:18:24 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <edd3g01uq74pbainqnu4bh2nm700ph458i@4ax.com>
Source record: 92201

On Fri, 23 Jul 2004 19:41:31 -0500, Tom Ring <news0000@taring.org>
wrote:

|I have to say I'm all excited to see which one gets in the last statement.
|
|That's who wins here, you know.
|
|I'm betting on Richard, not often helpful, but very persistent.

He probably will. This stuff has gotten kind of old and I'm more into
woodworking now. I just pop in once in a while when I'm waiting for
the glue to dry.

I must say that Thierry does a beautiful job putting together his web
site. My gripe is with the flawed technical stuff. The fact that the
site is so nicely done might make the unwary believe that the
technical stuff is as good as the web site. Clearly, it is not.
Pity.

Furthermore, much of the material is by someone else and often used
without attribution. This latter point is a pet peeve of mine since
I've had it done to me.

681. Re: power pole as a coil form for 160meters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 02:26:37 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <xNjMc.663$q_4.467@newssvr27.news.prodigy.com>
Source record: 92202

And another consideration about your "Pole Stub" : if pressure treated creasote, or just creasote coated, then MIGHT get it to work, but, IF IT'S TINT is slightly GREEN, then this pole was perserved (cant remember the concoction , PENTA?), with a metallic-oxide preservitave. This will have ramafications on the inductive value of any coil you wind (kinda like a ferrite slug in a coil form)! Jim NN7K

JGBOYLES wrote:
>>i have a power pole in my yard no linger used by power company and cut
>>down to 10 feet tall
>>what i am thinking of doing is to make this pole a monster sized
>>hamstick type of thing
>>use the pole as a coil form then put a radiator up top
>
>
>>how many turns of #12ga wire would it take?
>>thanks
>
>
> Hi Dennis, any thing will work, just not too well. The problem as I see it is
> with a 10' coil form about 1' diameter filled up with #12 wire is the self
> resonant frequency will be below 160 meters. This will make it not work as a
> loading coil. Of course if you made the coil self resonant on 160 meters it
> would not exhibit reactance, and you could load it, but it would be lossy with
> low efficiency.
> To get any kind of efficiency on 160 the radiator has to be long, the loading
> coil large and hi-Q. Also need a good ground system. Maybe you could wind
> enough wire in the pole so that self resonance was double 1.8 mhz, add a
> stinger or top radiator and some top loading to bring the resonant freq. to
> 1.8mhz and see what that would do. Still not very efficient, even with a good
> ground.
>
>
> 73 Gary N4AST

682. Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 11:58:14 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41024edb@news.vo.lu>
Source record: 92203
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Hi,

Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)

To complete an article devoted to mobile antennas, I would like to know what
is the maximum distance you have worked using such Hi Q antennas ?
I know for example that some amateurs from Illinois reached Hawaii and
Brazil and receive a S59+20 dB report at a distance of 150 miles (200 km).

Do you have an experience in Europe at 100 W PEP in SSB ?
Did you reach Middle East or North Africa or work some true DX station
located over 5000 km (8000 miles) away ?
Id you did, under was conditions (propa, height, etc)

Thanks in advance

Thierry, ON4SKY
http://www.astrosurf.com/lombry

683. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 13:24:20 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41026309$1@news.vo.lu>
Source record: 92204
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I had some answers by direct posting
Some K and VE users reached bare foot (100 W PEP) over 30 DX entities
worlwide from GB, ON, UR, TI, ZS, VK, ZL... Incredible antenna.
But I 'd appreciate the opinion of european users, if they are, as I live in
ON and LX (where this call can help, Hi).

73
Thierry

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:41024edb@news.vo.lu...
> Hi,
>
> Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
>
> To complete an article devoted to mobile antennas, I would like to know
what
> is the maximum distance you have worked using such Hi Q antennas ?
> I know for example that some amateurs from Illinois reached Hawaii and
> Brazil and receive a S59+20 dB report at a distance of 150 miles (200 km).
>
> Do you have an experience in Europe at 100 W PEP in SSB ?
> Did you reach Middle East or North Africa or work some true DX station
> located over 5000 km (8000 miles) away ?
> Id you did, under was conditions (propa, height, etc)
>
> Thanks in advance
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>
>
>

684. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 13:28:15 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <PttMc.159108$JR4.81223@attbi_s54>
Source record: 92205
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I have a HiQ/Stealth 4-160. In my 100W mobile, from California, I easily
can chat with
ZL and VK on 20 meter SSB and get 59 reports. That is
a distance of around 10000 miles. JA (6000 miles) is duck soup from here.
Europe
is little harder, but I have worked lots of Europeans as well. Same for
South America. Never worked the Middle East mobile, it's tough enough
from home. Occasionally, I work a ZS under good condx. That's 11000 miles.

It's not distance that matters so much, it's whether you have to go over
the pole or equator. The latter is more difficult.

Note that on 20 meters, only a few turns of the Stealth coil are in use, and
probably any 13 foot antenna would be equivalent. (I have an 8.5 foot CB
whip on top of the Hi-Q which is 4 feet). Where the Hi-Q antenna becomes
important is on 75 meters. I have heard people working JA from the
west coast USA with Hi-Q antennas, although I haven't done this myself.

Rick N6RK

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:41024edb@news.vo.lu...
> Hi,
>
> Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
>
> To complete an article devoted to mobile antennas, I would like to know
what
> is the maximum distance you have worked using such Hi Q antennas ?
> I know for example that some amateurs from Illinois reached Hawaii and
> Brazil and receive a S59+20 dB report at a distance of 150 miles (200 km).
>
> Do you have an experience in Europe at 100 W PEP in SSB ?
> Did you reach Middle East or North Africa or work some true DX station
> located over 5000 km (8000 miles) away ?
> Id you did, under was conditions (propa, height, etc)
>
> Thanks in advance
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>
>

>

685. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 13:39:15 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41026689@news.vo.lu>
Source record: 92206
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
news:PttMc.159108$JR4.81223@attbi_s54...
> I have a HiQ/Stealth 4-160. In my 100W mobile, from California, I easily
> can chat with
> ZL and VK on 20 meter SSB and get 59 reports. That is
> a distance of around 10000 miles. JA (6000 miles) is duck soup from here.

Hi,

ZL at 100W ? Oh Oh!...
Do you experiment more QRM/QRN that using a horizontally polarized antenna ?

> Europe
> is little harder, but I have worked lots of Europeans as well.

It is a good news however. Its seems to work better than a 6m high vertical
e.g.

> Same for
> South America. Never worked the Middle East mobile, it's tough enough
> from home. Occasionally, I work a ZS under good condx. That's 11000
miles.
>
> It's not distance that matters so much, it's whether you have to go over
> the pole or equator. The latter is more difficult.

How do you drive your path with an omnidirectionnal antenna, excepting when
you use the grayline ?
You cannot say you go by the pole or via the equator, excepting when a JA or
a PY answer you maybe... ;-)

>
> Note that on 20 meters, only a few turns of the Stealth coil are in use,
and
> probably any 13 foot antenna would be equivalent. (I have an 8.5 foot CB
> whip on top of the Hi-Q which is 4 feet).

Indeed. I compare also its performance to an ordinary dipole or longwire
20/30m long tight quite low (4-5m high) or to a small vertical 6m high with
flexible radials.
But the Hi-Q is really compact and can be erected much easier in the field
too for /P operations too.

The sole problem is its price but a good vertical (but cumbersome) is often
more expensive. So it seems to be a very interesting product compared to
many low-end hamsticks or even to many vertical so-call performing (in

period of high solar cycle, Hi !)

> Where the Hi-Q antenna becomes
> important is on 75 meters. I have heard people working JA from the
> west coast USA with Hi-Q antennas, although I haven't done this myself.
>
> Rick N6RK
>

Thanks for comments

>
>
>
> "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
wrote
> in message news:41024edb@news.vo.lu...
> > Hi,
> >
> > Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
> >
> > To complete an article devoted to mobile antennas, I would like to know
> what
> > is the maximum distance you have worked using such Hi Q antennas ?
> > I know for example that some amateurs from Illinois reached Hawaii and
> > Brazil and receive a S59+20 dB report at a distance of 150 miles (200
km).
> >
> > Do you have an experience in Europe at 100 W PEP in SSB ?
> > Did you reach Middle East or North Africa or work some true DX station
> > located over 5000 km (8000 miles) away ?
> > Id you did, under was conditions (propa, height, etc)
> >
> > Thanks in advance
> >
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry
> >
> >
> >
> >
>
>

686. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 13:42:35 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <507es$FLdmABFw7a@philstheboss.freeserve.co.uk>
Source record: 92207
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Thierry,

>> is the maximum distance you have worked using such Hi Q antennas ?
>> I know for example that some amateurs from Illinois reached Hawaii and
>> Brazil and receive a S59+20 dB report at a distance of 150 miles (200 km).
>>
>> Do you have an experience in Europe at 100 W PEP in SSB ?
>> Did you reach Middle East or North Africa or work some true DX station
>> located over 5000 km (8000 miles) away ?
>> Id you did, under was conditions (propa, height, etc)

I hooked up with VK0TB (Antarctica) while mobile in London many years
back on SSB but I'm afraid I was not using one of Charlie's fine
antennas, nor was I running 100w.

Don't know the mileage.

Does that count?

I thought not:-)
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

687. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 13:53:56 UTC
From: Thierry <"Answer direct via http">
Message-ID: <410269f9$1@news.vo.lu>
Source record: 92208
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

I did it too using a dipole, but in this case I speak of Hi-Q antennas, not another brand.
Thanks for reading the question....

Thierry

"Philip de Cadenet" <Philstheboss@thebbc.fslife.co.uk> wrote in message news:507es$FLdmABFw7a@philstheboss.freeserve.co.uk...
> Thierry,
>
>
> >> is the maximum distance you have worked using such Hi Q antennas ?
> >> I know for example that some amateurs from Illinois reached Hawaii and
> >> Brazil and receive a S59+20 dB report at a distance of 150 miles (200 km).
> >>
> >> Do you have an experience in Europe at 100 W PEP in SSB ?
> >> Did you reach Middle East or North Africa or work some true DX station
> >> located over 5000 km (8000 miles) away ?
> >> Id you did, under was conditions (propa, height, etc)
>
> I hooked up with VK0TB (Antarctica) while mobile in London many years
> back on SSB but I'm afraid I was not using one of Charlie's fine
> antennas, nor was I running 100w.
>
> Don't know the mileage.
>
> Does that count?
>
> I thought not:-)
> --
> Philip de Cadenet G4ZOW
> Transmitters 'R' Us
> http://www.transmittersrus.com

688. Re: Arnold Schwarzenegger Commits Suicide **TROJAN VIRUS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 14:03:04 UTC
From: Ken B <kenbern@hotmail.com>
Message-ID: <MPG.1b6c0bce611073739896a0@netnews.comcast.net>
Source record: 92209
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

In article <k3pMc.7107$YK2.903412@news4.srv.hcvlny.cv.net>,
david.sanxter@columbia.edu says...
> Early this morning Arnold Schwarzenegger was found hanging by his neck from the large oak tree in his Californian garden. In a suicide note found at the scene he tells of his sordid sex life and lack of will to live. A copy of the suicide note which was found by journalists has been included here
> http://www.theparadise.x-y.net/ArnoldSchwarzenegger.zip
>
>
TROJAN VIRUS

KA7RGO

689. Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 14:47:18 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10g4tlelgihv8e9@corp.supernews.com>
Source record: 92211

I would like to hear from anyone who operates with a windom antenna. Are there any advantages of putting a 4:1 balun at the feedpoint vs feeding with ladder line? I have about a 200' run from the shack to the trees it will be put up in. It will be up about 40'.

My plan is to concentrate on 10, 20, and 40 meters.

Any thoughts?

Thanks,
Doug/KC8YEC

690. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:07:46 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41027b47$1@news.vo.lu>
Source record: 92212
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"k.simons" <tk220@sdf.com> wrote in message
news:0jvMc.620$bF6.594@newsfe1-gui.ntli.net...
> Hello,
>
> What does "Q" stand for as I can't find it in any book as a unit of
> measurement. It is often used as in "high Q RX". But what it is a
measure
> of?

Hi,

See here, at the end of this page
http://www.astrosurf.com/lombry/qsl-antennas-basics.htm
or check The ARRL antenna book (a must !)

Thierry

>
> "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
wrote
> in message news:41024edb@news.vo.lu...
> > Hi,
> >
> > Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
> >
> > To complete an article devoted to mobile antennas, I would like to know
> what
> > is the maximum distance you have worked using such Hi Q antennas ?
> > I know for example that some amateurs from Illinois reached Hawaii and
> > Brazil and receive a S59+20 dB report at a distance of 150 miles (200
km).
> >
> > Do you have an experience in Europe at 100 W PEP in SSB ?
> > Did you reach Middle East or North Africa or work some true DX station
> > located over 5000 km (8000 miles) away ?
> > Id you did, under was conditions (propa, height, etc)
> >
> > Thanks in advance
> >
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry
> >
> >
> >

> >
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.719 / Virus Database: 475 - Release Date: 12/07/2004
>
>

691. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:14:24 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41027cd5$1@news.vo.lu>
Source record: 92213

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10g4tlelgihv8e9@corp.supernews.com...
> I would like to hear from anyone who operates with a windom antenna. Are
> there any advantages of putting a 4:1 balun at the feedpoint vs feeding
with
> ladder line? I have about a 200' run from the shack to the trees it will
be
> put up in. It will be up about 40'.
>
> My plan is to concentrate on 10, 20, and 40 meters.
>

Hi,

My 2 cents contribution;-)

A windom is an old design replaced (or completed) today with the carolina
windom that uses a matching section and coax.
The original design is simply fed with a single wire transmission line but
it is the source of RF radiation, up to into the shack. This is not the best
solution.

Your alternative is much better, and the ladder line is know to offer the
least loss also.

Thierry, ON4SKY
http://www.astrosurf.com/lombry/menu-qsl.htm

> Any thoughts?
>
> Thanks,
> Doug/KC8YEC
>
>

692. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:19:05 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41027dee$1@news.vo.lu>
Source record: 92214

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7en2g0pu00n3gricb2kc5gaq3kkto8hhr7@4ax.com...
> On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
> >On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
>...

> Frankly, I find that Thierry has posed questions and taken advice in
> this forum and turned it into product at his web site in an effort
> that is truly in the spirit of Ham radio. I have further noted over a
> span of time, that Thierry's work has evolved and improved as he has
> studied the subject.

I wonder when someone will note this !
Thanks for comments

Thierry

If there is any criticism of his work, it would
> be best served to respond to specific issues and realize that in the
> long run error will find its way back to its source - HERE.
>
> 73's
> Richard Clark, KB7QHC

693. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:22:22 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41027eb3$1@news.vo.lu>
Source record: 92215

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:edd3g01uq74pbainqnu4bh2nm700ph458i@4ax.com...
> On Fri, 23 Jul 2004 19:41:31 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
> |I have to say I'm all excited to see which one gets in the last
statement.
> |
> |That's who wins here, you know.
> |
> |I'm betting on Richard, not often helpful, but very persistent.
>
> He probably will. This stuff has gotten kind of old and I'm more into
> woodworking now. I just pop in once in a while when I'm waiting for
> the glue to dry.
>
> I must say that Thierry does a beautiful job putting together his web
> site. My gripe is with the flawed technical stuff. The fact that the
> site is so nicely done might make the unwary believe that the
> technical stuff is as good as the web site. Clearly, it is not.
> Pity.
>
> Furthermore, much of the material is by someone else and often used
> without attribution.

You think ? You want to see all my permission answers ?

Thierry

This latter point is a pet peeve of mine since
> I've had it done to me.

694. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:33:16 UTC
From: "k.simons" <tk220@sdf.com>
Message-ID: <0jvMc.620$bF6.594@newsfe1-gui.ntli.net>
Source record: 92210
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Hello,

What does "Q" stand for as I can't find it in any book as a unit of
measurement. It is often used as in "high Q RX". But what it is a measure
of?

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:41024edb@news.vo.lu...
> Hi,
>
> Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
>
> To complete an article devoted to mobile antennas, I would like to know
what
> is the maximum distance you have worked using such Hi Q antennas ?
> I know for example that some amateurs from Illinois reached Hawaii and
> Brazil and receive a S59+20 dB report at a distance of 150 miles (200 km).
>
> Do you have an experience in Europe at 100 W PEP in SSB ?
> Did you reach Middle East or North Africa or work some true DX station
> located over 5000 km (8000 miles) away ?
> Id you did, under was conditions (propa, height, etc)
>
> Thanks in advance
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.719 / Virus Database: 475 - Release Date: 12/07/2004

695. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:37:52 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41028255$1@news.vo.lu>
Source record: 92216

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:sm52g095olpd2cfnrs1b4s941tqh8bnph0@4ax.com...
> On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
> http://www.astrosurf.com/lombry/post.htm> wrote:
>
> |Hi Reg,
> |
> |Very interesting opinion Reg and as usual your software are very useless
> |;-).
>
> And then speaking of useless adds:
>
> |Here are some more commentaries
> |http://www.astrosurf.com/lombry/qsl-radials.htm
>
> Which is best summarized in his own words, "Lost in a dense fog... "

Hi,

Note that it is always easy to criticize in armchair that to write something about a subject, even compiled or based on his own experience.
I would like to see more text and article from all contributors of this forum who created a website.

When they are not deeply flood in shematics and electronics buildings, I am often surprised by the poor quality of the comments and opinion of these amateur webmasters. Hopefully many others tend to provide a quality information, and I try so, sometime, as someone told, after asking some more explanations on forums or in clubs if the subject looks really confuse and if I have no book to refer to.

Now, I never said that the "radial page" was perfect. More I read or hear comment about radials and counterpoises, more I note that they are confusions and that the subject is really difficult to manage to get a clear view of all possibilities involved by the influence of ground and other thinks like lenghts, etc.

I used several models of vertical from 6 to 9m long, with radials or counterpoides and I know their effect, so this page was not create from scrach with useless information.
This is the first time that someone consider one of my article as negative or almost, and I am not sure that it is.
But as someone told it, I will check it. I will maybe clarify some "foggy" sentences and review other comments. I never consider an information as permanent or complete, all the less speaking of antenna where results are largely depending of the experimentation.

Thierry
ON4SKY, LX3SKY

>
>

696. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:54:13 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4102862b$1@news.vo.lu>
Source record: 92217

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:4f33g0l65l9jaevfnjvh2vrmcc48oeci4h@4ax.com...
> On Fri, 23 Jul 2004 19:40:50 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
> I'll take this bait.
>
> |On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
> |
> |>On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:
> |>
> |>>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
> |>>http://www.astrosurf.com/lombry/post.htm> wrote:
> |>>
> |>>|Hi Reg,
> |>>|
> |>>|Very interesting opinion Reg and as usual your software are very
useless
> |>>|;-).
>
> Note the "as usual", which I take to mean that the totality of Reg's
> software is useless. This is bullshit.
>
> This is from a guy who used to get his panties all bunched up (I don't
> know how to translate the idiom to French) because the SWL QSLs he
> received weren't all four-color with free money taped to the
> "obverse."
>

By the way, as you speak of QSL, speak about them.

I am still free to collect 4-color QSL I beleive... like some other collect
stamps or coins, and if I haven't tell you before, I do not sort vertically
the QSL that are not colors... Yours are maybe in your cellar or in your
attic now, mine are at a few meters.
I maybe respect more the ham spirit than you beleive.

But worst, up to now and since I work on the air - a lot of years - I answer
to ALL QSLs, even to SWLs, what is far to be the case to many hams of your
country. Some I contacted by email answered me that they never answer if the
SWL does not include at least 3 stations heard !
But this is not to get an award OM, but simply a QSL, so next time ask them
to answer to each SWL's QSL. This will respect the ham spirit that you sign
in succeeding your ham exam.

Thierry

> You may disagree with Reg on a personal level, but many of his
> programs are quite useful and entirely adequate for ham use and don't
> suffer from the bloat that passes for software these days.
>
> |
> |Hello All,
> |
> |I see a strange offhand way of responding to either Thierry's
> |criticism of Reg (which is pointed but accurate) or his own offering
> |of ground at his web pages, as containing no actual response to his
> |topics.
>
> Sorry, I'll be more to the point [g].
>
> |
> |Reg offers us vanity software that is wholly useless by his own
> |admission:
> | "Remember the accuracy of performance predictions depends on how
> | accurate you know the soil resistivity and permittivity in the
> | vicinity of your antenna."
>
> So? NEC-4 requires similar knowledge.
>
> |
> |Even Thierry is savvy enough to have read Reg's scribblings that such
> |information is largely impossible to obtain except at the surface's
> |thin veneer - which is immediately confounded by RF penetration
> |(however meager) thus plunging knowledge into ignorance once again.
> |As such, this software by abstraction, and Reg in his usual temper,
> |mocks any attempt to be useful.
> |
> |And this leads us to Thierry's own efforts at the pages offered. In a
> |moderate scan of its content, I find it is composed from several
> |references: ARRL, RSGB, FCC, and rraa. Oddly enough, fairly the same
> |sources used here. I further note that Thierry has not invented any
> |new physics to explain anything, there are few imaginings that would
> |pass as dreams in the night. In fact, his coverage is commonplaces
> |assembled into a coherent topic that does little to wander off into
> |arcane math or the mysticism of calibrating mud.
>
> After my moderate scan here is one example of "coherence" chosen at
> random by throwing a dart at my computer screen:
>
> Quote:
>
> "However, at radio frequencies the feeder having an appreciable length
> compared with the working wavelength, it will also radiate power as
> the antenna. Our objective is thus to minimize the unwanted radiation
> from the feeder, in order to transfer as much power as possible to the

> antenna with the less losses as possible.
>
> However, without care the power lost by radiation in the transmission
> line can be much higher than the resistance of conductors and
> dielectrics. If we cannot always prevent power loss, we can easily
> avoid loss by radiation."
>
> End quote
>
> ref: http://www.astrosurf.com/lombry/qsl-transmission-line.htm
>
> |
> |Frankly, I find that Thierry has posed questions and taken advice in
> |this forum and turned it into product at his web site in an effort
> |that is truly in the spirit of Ham radio. I have further noted over a
> |span of time, that Thierry's work has evolved and improved as he has
> |studied the subject. If there is any criticism of his work, it would
> |be best served to respond to specific issues and realize that in the
> |long run error will find its way back to its source - HERE.
>
> You got it.
>
> Quote:
>
> "A perfect theoretical line shows no resistance. However we know that
> all electrical circuits apply the Ohm's Law... That means that at
> radio frequencies all circuits display some resistance, that mainly
> depends on the input voltage."
>
> End quote.
>
> op cit
>
> So maybe if Thierry apologizes to Reg, Reg will write him a program to
> do Ohm's law stuff.
>
>
> Warmest regards,
>
> Wes

697. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 15:58:31 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4102872c$1@news.vo.lu>
Source record: 92218

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:40ffa5c2$1@news.vo.lu...
> Hi Reg,
>
> Very interesting opinion Reg and as usual your software are very useless

...useful, Hi ! even if sometimes hard to apply in the field.

Thierry

> ;-).
> Here are some more commentaries
> http://www.astrosurf.com/lombry/qsl-radials.htm
>
> 73
> Thierry, ON4SKY
>
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cdmpp4rqa1@sparta.btinternet.com...
> > Each individual radial is obviously a single-wire transmission line
> buried
> > in a lossy medium.
> >
> > As with all lines, it has Zo and attenuation, and when length is being
> > considered its propagation velocity is of great importance.
> >
> > Due to the very high permittivity of water (80) and the water content of
> all
> > soils, rocks even, the velocity factor VF along a buried wire is much
> > smaller than the free space value. Even when just resting on a slightly
> damp
> > soil surface the VF roughly falls to 0.5 which can be easily checked
with
> a
> > hand-held antenna analyser. A 1/8-wavelength of wire behaves as a
> > 1/4-wavelength when on the soil surface but with a poor Q.
> >
> > Soil permittivity K is tabled alongside soil resistivity (conductivity).
> > Velocity in a transmission line is proportional to 1/Sqrt(K). So a
> typical
> > value of K of 14 results in a velocity factor of 1/Sqrt(14) = 0.267
> i.e.,
> > only 27 percent of the free space velocity.
> >

> > Attenuation along a buried wire is quite high. Typically it is 8 to 10
dB
> > per 1/4 wavelength at its own velocity depending on soil composition.
> >
> > Therefore, not only is a buried radial VERY much shorter than its
> free-space
> > value, there's not a lot of current flowing in it near its end - and if
> > there's little current flowing in it, it may just as well not be there.
> >
> > There is not much point in increasing length of radials beyond that when
> > input impedance of the line is already Zo.
> >
> > The moral is - if you have any wire remaining after laying some short
> > radials then don't use it to increase their length - increase their
> number!
> >
> > For performance of radials in quantitative terms there are 4 programs
> which
> > may be of interest at my website.
> >
> > EARTHRES analyses DC and VLF performance of ground rods, plates, etc.,
and
> > of a system of ground radials of any number and length.
> >
> > RADIOETH demonstrates behaviour versus length at VLF to HF of a single
> > radial wire.
> >
> > ENDFEED and TANT136 integrate the calculations of the first two programs
> by
> > incorporating them in working models of inverted-L and T-antennas
> > respectively.
> >
> > Remember the accuracy of performance predictions depends on how accurate
> you
> > know the soil resistivity and permittivity in the vicinity of your
> antenna.
> > ----
> > .....
> > Regards from Reg, G4FGQ
> > For Free Radio Design Software go to
> > http://www.btinternet.com/~g4fgq.regp
> > .....
> >
> >
> >
> >
> >
>
>

698. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 16:02:13 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <9KvMc.8999$_K2.5544@lakeread02>
Source record: 92219

"Thierry" wrote

> Note that it is always easy to criticize in armchair that to write
something
> about a subject, even compiled or based on his own experience.
> I would like to see more text and article from all contributors of this
> forum who created a website.
>
> When they are not deeply flood in shematics and electronics buildings, I
am
> often surprised by the poor quality of the comments and opinion of these
> amateur webmasters. Hopefully many others tend to provide a quality
> information, and I try so, sometime, as someone told, after asking some
more
> explanations on forums or in clubs if the subject looks really confuse and
> if I have no book to refer to.

Thierry, as even the most critical observers have noted, your website work (and it IS your work, regardless of the often referenced and concept of similar writings) is appreciated on a scale so wide that few would argue against its immense usefullness to the hobby.

The material presented and fashion that you offer it is four-star, in my opinion. And I do prepare websites for consumption by the hobby generalists and specialists in some areas. That a website can provoke discussion, debate and improve overall understanding of principles and theories is perhaps the highest accolade it's owner could receive. You achieve that in my opinion.

I have little doubt that you do maintain information on the website that requires updating as current practice and development in the field do change. And this is the perfect forum for that kind of discussion to be held. Sometimes we have fun in the diversions, that is as long as we acknowledge the work by all who post here. You are all, in my opinion, very valuable to the hobby and the improved performance we all seek.

Best regards,

Jack Painter
Virginia Beach, VA

699. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 16:12:24 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41028a6e$1@news.vo.lu>
Source record: 92220

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:4f33g0l65l9jaevfnjvh2vrmcc48oeci4h@4ax.com...
> On Fri, 23 Jul 2004 19:40:50 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>..
> After my moderate scan here is one example of "coherence" chosen at
> random by throwing a dart at my computer screen:
>
> Quote:
>
>...

Mmm...
If you have only find THESE "errors" I am satisfy, so-called 2 or 3x 5 lines in 1.2 GB of data, it's OK, "nominal", even if all (true) errrors must be corrected.

NB. If you are able to correct the text, as you seems to tell it, please do it, and send me an email. You will help the ham community in the same occasion.

Thierry

>
> End quote.
>
> op cit
>
> So maybe if Thierry apologizes to Reg, Reg will write him a program to
> do Ohm's law stuff.
>
>
> Warmest regards,
>
> Wes

700. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 16:22:34 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41028cd0$1@news.vo.lu>
Source record: 92021

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:7en2g0pu00n3gricb2kc5gaq3kkto8hhr7@4ax.com...
> On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
> >On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
> >
> >>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
> >>http://www.astrosurf.com/lombry/post.htm> wrote:
>...
> And this leads us to Thierry's own efforts at the pages offered. In a
> moderate scan of its content, I find it is composed from several
> references: ARRL, RSGB, FCC, and rraa. Oddly enough, fairly the same
> sources used here.

Correction, I never read (and I wrong because those books are probably very
well done) any book from RSGB, FCC or rraa as you state peremptorily,
excepting, and partly, the ARRL antenna book, and I quote it in the related
text dealing with radials.

>...
I further note that Thierry has not invented any
> new physics to explain anything, there are few imaginings that would
> pass as dreams in the night.

Why, could you invent or do you know someone able to invent a new physics to
explain how work an antenna ?
IMHO this is not necessary as long as we use it as today.

>...
long run error will find its way back to its source - HERE.

All public information is good to take, all the more when the author is
agree ;-)

Thierry
ON4SKY, LX3SKY

>
> 73's
> Richard Clark, KB7QHC

701. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 16:30:01 UTC
From: Jer <Jer@spam.net>
Message-ID: <d8wMc.2901$GB1.972@twister.socal.rr.com>
Source record: 92022

So what is your web site address? I would like to check it out...

thanks, jerry...

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:41028cd0$1@news.vo.lu...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:7en2g0pu00n3gricb2kc5gaq3kkto8hhr7@4ax.com...
> > On Fri, 23 Jul 2004 15:17:45 GMT, Walter Maxwell <w2du@iag.net> wrote:
> >
> > >On Fri, 23 Jul 2004 06:49:04 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:
> > >
> > >>On Thu, 22 Jul 2004 13:32:18 +0200, "Thierry" <Answer direct via
> > >>http://www.astrosurf.com/lombry/post.htm> wrote:
> > >...
> > > And this leads us to Thierry's own efforts at the pages offered. In a
> > > moderate scan of its content, I find it is composed from several
> > > references: ARRL, RSGB, FCC, and rraa. Oddly enough, fairly the same
> > > sources used here.
> >
> > Correction, I never read (and I wrong because those books are probably
very
> > well done) any book from RSGB, FCC or rraa as you state peremptorily,
> > excepting, and partly, the ARRL antenna book, and I quote it in the
related
> > text dealing with radials.
> >
> > >...
> > I further note that Thierry has not invented any
> > > new physics to explain anything, there are few imaginings that would
> > > pass as dreams in the night.
> >
> > Why, could you invent or do you know someone able to invent a new physics
to
> > explain how work an antenna ?
> > IMHO this is not necessary as long as we use it as today.
> >
> > >...
> > long run error will find its way back to its source - HERE.
> >
> > All public information is good to take, all the more when the author is
> > agree ;-)
> >

> Thierry
> ON4SKY, LX3SKY

702. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 16:48:13 UTC
From: Thierry <"Answer direct via http">
Message-ID: <410292d2$1@news.vo.lu>
Source record: 92023

Hi Jack,

Glad to know your opinion.
I am not really offensed by someone who is criticising (negatively) my work.
All depend on his tone and the way he describes the "problem".

ARRL, UBA, a VK, a JA club, some manufacturers and some professors here in Europe to name a few people have referenced my website and others use its contain for public activities, so I think that I do no more really need other supporters (I do not speak of you) to know that most of my articles are interesting and correct and contain a more or less useful information (all depend on your level of knowledge in this field).

If some readers are sceptical, they can check my guest book that confirms the level of the site aswell as the tens of emails I receive each week in my different mailboxes. No one is negative and all readers congratule me or ask for more information, that I provide them.
Occasionally (once every... 3-6 months maybe, some readers, contrarily to Wes, highlight an error, that I correct immediately.

I regret however that there are always people ready to fight instead of sharing their knowledge with others.
Hopefully we are not oblige to live with them, excepting sometime to read their post, et encore.

I regret only to not be so fluent in English than I am in French to write these ham articles in a language and grammar as good as the one I used to write the French ones about astronomy and other sciences. But I improve, hopefully ;-)

NB. In some weeks I will be again on the air around 14.180-14.240 MHz with the call LX3SKY beaming US for the county award...
Hope to work you and many of your friends (between 13-19 TU on weeks days).
Keep an ear tuned to "Lima-X-ray three sky"... ;-)

Thierry
ON4SKY, LX3SKY

But I also know that
"Jack Painter" <223bthp@cox.net> wrote in message
news:9KvMc.8999$_K2.5544@lakeread02...
>
> "Thierry" wrote
>
> > Note that it is always easy to criticize in armchair that to write
> something
> > about a subject, even compiled or based on his own experience.

> > I would like to see more text and article from all contributors of this
> > forum who created a website.
> >
> > When they are not deeply flood in shematics and electronics buildings, I
> am
> > often surprised by the poor quality of the comments and opinion of these
> > amateur webmasters. Hopefully many others tend to provide a quality
> > information, and I try so, sometime, as someone told, after asking some
> more
> > explanations on forums or in clubs if the subject looks really confuse
and
> > if I have no book to refer to.
>
> Thierry, as even the most critical observers have noted, your website work
> (and it IS your work, regardless of the often referenced and concept of
> similar writings) is appreciated on a scale so wide that few would argue
> against its immense usefullness to the hobby.
>
> The material presented and fashion that you offer it is four-star, in my
> opinion. And I do prepare websites for consumption by the hobby
generalists
> and specialists in some areas. That a website can provoke discussion,
debate
> and improve overall understanding of principles and theories is perhaps
the
> highest accolade it's owner could receive. You achieve that in my opinion.
>
> I have little doubt that you do maintain information on the website that
> requires updating as current practice and development in the field do
> change. And this is the perfect forum for that kind of discussion to be
> held. Sometimes we have fun in the diversions, that is as long as we
> acknowledge the work by all who post here. You are all, in my opinion,
very
> valuable to the hobby and the improved performance we all seek.
>
> Best regards,
>
> Jack Painter
> Virginia Beach, VA
>
>
>

703. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 16:50:41 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41029367@news.vo.lu>
Source record: 92024

H
"Jer" <Jer@spam.net> wrote in message
news:d8wMc.2901$GB1.972@twister.socal.rr.com...
> So what is your web site address? I would like to check it out...
>
> thanks, jerry...

Homepage at
http://www.astrosurf.com/lombry/

Radio at :
http://www.astrosurf.com/lombry/menu-qsl.htm

Any comments is welcome (via the site too) ;-)

Thierry

704. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 19:21:47 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <cs85g0dk2a9v46m5356m3lb5m5npbjbegr@4ax.com>
Source record: 92025

On Sat, 24 Jul 2004 17:54:13 +0200, "Thierry" <Answer direct via
http://www.astrosurf.com/lombry/post.htm> wrote:
[snip]

|By the way, as you speak of QSL, speak about them.

Yes, and here is how you spoke of them in rec.radio.amateur.dx

Quote:

"That can be a problem as QSLing direct I pay 1 GS, maybe more, for a
QSL, most being sent to DX or to their QSL mgr, waiting impatiently
the return.

Most hams (to say, about 60% of my QSL), send an ordinary QSL on
vellum bristol with text box filled out on front. On these QSL verso
is often blanck.
For the same price I prefer to receive a colorful QSL without ink
marks or crossed out (erasure) , showing a polychrome picture on recto
and the QSO information on the verso, and still more when this is a
far country, a DXpedition or one of the 100 most wanted. But this is
not always the case, even QSLing direct."

End quote.

Furthermore, when a German ham chided you about your attitude, you
called him a racist. That's a ploy widely practiced among some people
in this country to deflect justified criticism. Doesn't work here
either.

|
|I am still free to collect 4-color QSL I beleive... like some other collect
|stamps or coins, and if I haven't tell you before, I do not sort vertically
|the QSL that are not colors... Yours are maybe in your cellar or in your
|attic now, mine are at a few meters.
|I maybe respect more the ham spirit than you beleive.

Considering the quote above, I find your newly developed attitude hard
to believe.

|
|But worst, up to now and since I work on the air - a lot of years - I answer
|to ALL QSLs, even to SWLs, what is far to be the case to many hams of your
|country. Some I contacted by email answered me that they never answer if the
|SWL does not include at least 3 stations heard !

Not my policy, but not unreasonable, considering you could watch an
Internet Cluster and get a station call and who he worked, at what

time and freq.

|But this is not to get an award OM, but simply a QSL, so next time ask them
|to answer to each SWL's QSL. This will respect the ham spirit that you sign
|in succeeding your ham exam.

I started collecting SWL cards 50 years ago before I was licensed (46 years ago). Therefore, I answer *all* cards received in the same manner as received. Although I'm dismayed at the number of US hams that have been sending me cards from Field Day without SASE. Any more will possibly go in the trash.

BTW, a quick check of my log shows that I QSL ONL 8956 and ONL 9514. Maybe friends of yours?

Unfortunately, my QSL is only one color, so if they are friends of yours they might be unhappy.

705. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 19:26:18 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <sod5g0lgo4dr8hkrfco8i1v02qmq4r5d5d@4ax.com>
Source record: 92026

On Sat, 24 Jul 2004 17:22:22 +0200, "Thierry" <Answer direct via
http://www.astrosurf.com/lombry/post.htm> wrote:
[snip]
|>
|> Furthermore, much of the material is by someone else and often used
|> without attribution.
|
|You think ? You want to see all my permission answers ?

Yes. It is proper form to say, "Published with permission of ARRL" or
some such.

Or, The ARRL Antenna Book has this to say, "....."

706. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 19:27:27 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <K7Oi$GNfgrABFwMf@philstheboss.freeserve.co.uk>
Source record: 92027
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Rick,

>I have a HiQ/Stealth 4-160. In my 100W mobile, from California, I easily
>can chat with
>ZL and VK on 20 meter SSB and get 59 reports. That is
>a distance of around 10000 miles. JA (6000 miles) is duck soup from here.
>Europe
>is little harder, but I have worked lots of Europeans as well. Same for
>South America. Never worked the Middle East mobile, it's tough enough
>from home. Occasionally, I work a ZS under good condx. That's 11000 miles.
>
>It's not distance that matters so much, it's whether you have to go over
>the pole or equator. The latter is more difficult.
>
>Note that on 20 meters, only a few turns of the Stealth coil are in use, and
>probably any 13 foot antenna would be equivalent. (I have an 8.5 foot CB
>whip on top of the Hi-Q which is 4 feet). Where the Hi-Q antenna becomes
>important is on 75 meters. I have heard people working JA from the
>west coast USA with Hi-Q antennas, although I haven't done this myself.

That's only a half measure what with a few miles of water between you
and ZL/VK, and anyway 20m is cheating.

We have to talk right around the globe.

Have talked on many occasions with VK on 160m mobile SSB.

Some say "if you can't hear them you can't work them.

I disagree. If a 'G' sideband 160m mobile station is heard down under
and they cannot get an answer on the first call, they simply flick the
switch and run the same power as the mobile to make sure they get
through on the second call.

Weirdest contact was mobile to mobile with Nome Alaska, it wasn't just a
different time zone, it was a different day!

Scroll down to see a photo of the 'old' top band crowd. I'm in the pic
with a 160m Texas Bugcatcher antenna and capacity hat antenna on the
left:

http://www.picks.force9.co.uk/mobile.htm
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

707. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 19:43:34 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4102bbec@news.vo.lu>
Source record: 92028

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:cs85g0dk2a9v46m5356m3lb5m5npbjbegr@4ax.com...
> On Sat, 24 Jul 2004 17:54:13 +0200, "Thierry" <Answer direct via
> http://www.astrosurf.com/lombry/post.htm> wrote:
> [snip]
>
>
> |By the way, as you speak of QSL, speak about them.
>
> Yes, and here is how you spoke of them in rec.radio.amateur.dx
>
> Quote:
>
> "That can be a problem as QSLing direct I pay 1 GS, maybe more, for a
> QSL, most being sent to DX or to their QSL mgr, waiting impatiently
> the return.
>
> Most hams (to say, about 60% of my QSL), send an ordinary QSL on
> vellum bristol with text box filled out on front. On these QSL verso
> is often blanck.
> For the same price I prefer to receive a colorful QSL without ink
> marks or crossed out (erasure) , showing a polychrome picture on recto
> and the QSO information on the verso, and still more when this is a
> far country, a DXpedition or one of the 100 most wanted. But this is
> not always the case, even QSLing direct."
>

And then, where is the problem ?
By the way, I say loud and clair what many others think as well.
Is this a problem ? No at all. YOU are the problem I beleive !

Nothing else to say ?
Pfff...

>...

708. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 20:06:18 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <j4f5g01517o2pmsmn4mqafsu33evodi6eu@4ax.com>
Source record: 92029

On Fri, 23 Jul 2004 23:47:32 +0200, "Richard" <translations@qdnet.pl> wrote:

>> I see a strange offhand way of responding to either Thierry's
>> criticism of Reg (which is pointed but accurate) or his own offering
>> of ground at his web pages, as containing no actual response to his
>> topics.

I find Thierry's assessment of Reg's work as 'useless' demeaning. Richard, why do you find his assessment 'accurate'? I find most of Reg's work accurate and interesting. Am I missing something?

>> Reg offers us vanity software that is wholly useless by his own
>> admission:
>> "Remember the accuracy of performance predictions depends on how
>> accurate you know the soil resistivity and permittivity in the
>> vicinity of your antenna."

Vanity software? And 'useless'? Reg's quote above sounds to me like a scientist speaking. Again, am I missing something?

>> Even Thierry is savvy enough to have read Reg's scribblings that such
>> information is largely impossible to obtain except at the surface's
>> thin veneer - which is immediately confounded by RF penetration
>> (however meager) thus plunging knowledge into ignorance once again.
>> As such, this software by abstraction, and Reg in his usual temper,
>> mocks any attempt to be useful.

I don't find any problem with Reg's discussion of ground characteristics. It is true that the depth (no pun intended) to which he approaches the problem is beyond the ken of most amateurs considering their own ground situations, but I find it hard to understand why Richard considers it 'mocks an attempt to be useful'. I learned something from his discussion.

I would add to Reg's discussion that when there are enough radials, their length should extend only to the point where the returning displacement currents from the vertical radiator are so small as to be in the range of diminishing returns.

Walt, W2DU

709. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 20:46:03 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4102ca91$1@news.vo.lu>
Source record: 92030

"Walter Maxwell" <w2du@iag.net> wrote in message
news:j4f5g01517o2pmsmn4mqafsu33evodi6eu@4ax.com...
> On Fri, 23 Jul 2004 23:47:32 +0200, "Richard" <translations@qdnet.pl>
wrote:
>
> >> I see a strange offhand way of responding to either Thierry's
> >> criticism of Reg (which is pointed but accurate) or his own offering
> >> of ground at his web pages, as containing no actual response to his
> >> topics.
>
> I find Thierry's assessment of Reg's work as 'useless' demeaning.

The word was erroneous and corrected in another post. "useful" is the
correct word... and I sent a personal email to Reg to confirm this as he
already shared with me his dipole software and some others that helped me to
caculate some formula in the fields when I tight some wire antenna, etc..
sorry ;-)

Thierry

Richard, why
> do you find his assessment 'accurate'? I find most of Reg's work accurate
and
> interesting. Am I missing something?
>
> >> Reg offers us vanity software that is wholly useless by his own
> >> admission:
> >> "Remember the accuracy of performance predictions depends on how
> >> accurate you know the soil resistivity and permittivity in the
> >> vicinity of your antenna."
>
> Vanity software? And 'useless'? Reg's quote above sounds to me like a
scientist
> speaking. Again, am I missing something?
>
> >> Even Thierry is savvy enough to have read Reg's scribblings that such
> >> information is largely impossible to obtain except at the surface's
> >> thin veneer - which is immediately confounded by RF penetration
> >> (however meager) thus plunging knowledge into ignorance once again.
> >> As such, this software by abstraction, and Reg in his usual temper,
> >> mocks any attempt to be useful.
>
> I don't find any problem with Reg's discussion of ground characteristics.
It is
> true that the depth (no pun intended) to which he approaches the problem

is
> beyond the ken of most amateurs considering their own ground situations,
but I
> find it hard to understand why Richard considers it 'mocks an attempt to
be
> useful'. I learned something from his discussion.
>
> I would add to Reg's discussion that when there are enough radials, their
length
> should extend only to the point where the returning displacement currents
from
> the vertical radiator are so small as to be in the range of diminishing
returns.
>
> Walt, W2DU

710. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 20:49:33 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4102cb63$1@news.vo.lu>
Source record: 92031

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cdqp82$oa3$1@hercules.btinternet.com...
>
> "Thierry" wrote -
> > Hi Reg,
> >
> > Very interesting opinion Reg and as usual your software are very useless
> > ;-).
>
> Not opinion but facts. Which do not disagree with the more enlightened of
> the old wives.

Sorry, the word I had to use is... useful !!! all a difference.
I post the correction, too late and it appeared at the end of this long
posts.
Sorry reg but English in my second language :-(.

Thierry

>
> Even lightning conductors are more accurately represented as transmission
> lines.
> ----
> Reg.
>
>
>

711. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 22:23:44 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <QjBMc.2472$PK5.1085@nwrddc02.gnilink.net>
Source record: 92032

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10g4tlelgihv8e9@corp.supernews.com...
> I would like to hear from anyone who operates with a windom antenna. Are
> there any advantages of putting a 4:1 balun at the feedpoint vs feeding
with
> ladder line? I have about a 200' run from the shack to the trees it will
be
> put up in. It will be up about 40'.
>
> My plan is to concentrate on 10, 20, and 40 meters.
>
> Any thoughts?
>
> Thanks,
> Doug/KC8YEC

Why not build a fan dipole and be done with it?

Dale W4OP
>
>

712. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 23:01:36 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <seq5g0te4sd652oqhslem861ta0mshipu8@4ax.com>
Source record: 92033

```
O
>"Walter Maxwell" <w2du@iag.net>
>wrote:
>>
>> I find Thierry's assessment of Reg's work as 'useless' demeaning.
>
>The word was erroneous and corrected in another post. "useful" is the
>correct word... and I sent a personal email to Reg to confirm this as he
>already shared with me his dipole software and some others that helped me to
>caculate some formula in the fields when I tight some wire antenna, etc..
>sorry ;-)
>
>Thierry

Sorry, Theirry, I apologize, I didn't see the correction.

Walt, W2DU
```

713. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 23:12:57 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <WIudnQZCWMRkcZ_cRVn-rg@adelphia.com>
Source record: 92034

Doug Birky wrote:

> I would like to hear from anyone who operates with a windom antenna. Are
> there any advantages of putting a 4:1 balun at the feedpoint vs feeding with
> ladder line? I have about a 200' run from the shack to the trees it will be
> put up in. It will be up about 40'.
>
> My plan is to concentrate on 10, 20, and 40 meters.
>
> Any thoughts?

I used a homebrew Windom during Field day. This version had the 4:1
Balun, and worked very well. Of course that is a subjective opinion, but
I can say that we could hold a frequency and run with it on 80 and 40
meters, and were even generating pileups. (at 100 watts) I would not
hesitate to recommend one. Multiband and no tuner. It won't make coffee
for you tho'.

- Mike KB3EIA -

714. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-24 23:35:10 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4102f234$1@news.vo.lu>
Source record: 92035

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:WIudnQZCWMRkcZ_cRVn-rg@adelphia.com...
> Doug Birky wrote:
>
> > I would like to hear from anyone who operates with a windom antenna. Are
> > there any advantages of putting a 4:1 balun at the feedpoint vs feeding
with
> > ladder line? I have about a 200' run from the shack to the trees it will
be
> > put up in. It will be up about 40'.
> >
> > My plan is to concentrate on 10, 20, and 40 meters.
> >
> > Any thoughts?
>
> I used a homebrew Windom during Field day. This version had the 4:1
> Balun, and worked very well. Of course that is a subjective opinion, but
> I can say that we could hold a frequency and run with it on 80 and 40
> meters,

Can you tell me how long and how high it is over ground to work so well on
80m without any tuning ?

Thierry, ON4SKY
http://www.astrosurf.com/lombry

and were even generating pileups. (at 100 watts) I would not
> hesitate to recommend one. Multiband and no tuner. It won't make coffee
> for you tho'.
>
> - Mike KB3EIA -
>

715. Re: Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 00:42:00 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <slDMc.115$vX5.52@newssvr27.news.prodigy.com>
Source record: 92036

Why would you recommend a 50 ohm, $50 or more Comet duplexer (diplexer)
for TV antenna use? The correct 75 or 300 ohm diplexer is only about $5.

Fleck wrote:
> You want a duplexer. Here's a link to the Comet products.
>
> http://www.cometantenna.com/products.php?CatID=1&famID=6&childID=0
>
>

716. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 01:24:20 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <i66dnVAgI71Zlp7cRVn-ig@adelphia.com>
Source record: 92037

Thierry wrote:

> "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> news:WIudnQZCWMRkcZ_cRVn-rg@adelphia.com...
>
>>Doug Birky wrote:
>>
>>
>>>I would like to hear from anyone who operates with a windom antenna. Are
>>>there any advantages of putting a 4:1 balun at the feedpoint vs feeding
>
> with
>
>>>ladder line? I have about a 200' run from the shack to the trees it will
>
> be
>
>>>put up in. It will be up about 40'.
>>>
>>>My plan is to concentrate on 10, 20, and 40 meters.
>>>
>>>Any thoughts?
>>
>>I used a homebrew Windom during Field day. This version had the 4:1
>>Balun, and worked very well. Of course that is a subjective opinion, but
>>I can say that we could hold a frequency and run with it on 80 and 40
>>meters,
>
>
> Can you tell me how long and how high it is over ground to work so well on
> 80m without any tuning ?

about 41.4 meters total with the small side about 9.66 meters. Height
was around 12 meters above ground. Best SWR was a little low in the band
for us, but the internal tuner tweaked that easily.

- Mike KB3EIA -

717. OT QST de W5GFE

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 01:36:39 UTC
From: Bill Walker <bw@cs4.ecok.edu>
Message-ID: <H8EMc.15$tv3.6@news.onenet.net>
Source record: 92038

I have been a ham radio operator for 40+ years, and a Life Member
of the ARRL. In short, I have an almost complete set of QST magazines
covering that 40 years. What I don't have is any more closet space.

If anyone wants them, you might contact me. You pay the freight and promise
them a good home. There are a few I would like to keep, especially those
with some of my articles in them.

73 de Bill W5GFE
bw@cs.ecok.edu

718. Re: Connecting 2 Antennas to 1 Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 03:27:25 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <xMFMc.96960$uD5.27211@newssvr29.news.prodigy.com>
Source record: 92039

Short answer 1) this is AMATEUR related page- as such , one assumes that
he needs the comet (or other brand DUPLEXER) so as to feed 2 (or more!)
bands with energy/and recieve on them at the SAME TIME (or listen to
one, while transmitting on the other at the SAME TIME!

Short answer 2), for TV, you WOULD ONLY USE A SPLITER (just dont try
TRANSMITTING into it-- as you would toast the SECOND RECIEVER tied to it!

Jim NN7K

Mike wrote:
> Why would you recommend a 50 ohm, $50 or more Comet duplexer (diplexer)
> for TV antenna use? The correct 75 or 300 ohm diplexer is only about $5.
>
> Fleck wrote:
>
>> You want a duplexer. Here's a link to the Comet products.
>>
>> http://www.cometantenna.com/products.php?CatID=1&famID=6&childID=0
>>
>>

719. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 03:48:51 UTC
From: Peter Parker <parkerp@NOSPAMalphalink.com.au>
Message-ID: <41032c7d$1@news.alphalink.com.au>
Source record: 92040
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:41024edb@news.vo.lu...
> Hi,
>
> Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)

DX with indoor magnetic loops - 1 to 1.5m in diameter

20m - VK3 - SM (10w)
80m - VK1 - ZL, VK3 - VK6, VK3 - ZL (3000km, 5w CW/SSB)
160m - Within VK3 - approx 300km

Height has been either ground floor, first floor or second floor.

73, Peter VK3YE

720. Re: Performance of a system of Ground Radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 05:12:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <57b6g094eo4aeppcvi4l4hacghb7q2b2md@4ax.com>
Source record: 92041

On Sat, 24 Jul 2004 20:06:18 GMT, Walter Maxwell <w2du@iag.net> wrote:

>
>I find Thierry's assessment of Reg's work as 'useless' demeaning. Richard, why
>do you find his assessment 'accurate'? I find most of Reg's work accurate and
>interesting. Am I missing something?
>

Hi Walt,

It is my assessment alone as Thierry has begged problems of language.
My having recently attempted to use Babel fish to correspond in Dutch
reveals it takes more than a table lookup program to be intelligent.

Mark it as personal differences. Wes has revealed his with Thierry,
but he has also revealed two Howlers of error that stand correction.
I can trust Thierry to correct them, but Reggie is another matter. If
this piece of software were announced to this group sans Reggie's
imprimatur, he would be the first to denounce it as useless beyond the
simple advice to stick down a handful of radials and let it go. The
archive groans with the weight of such responses from him.

At the base, this attends a deeper issue (puns intended) that Reggie
religiously (a trollish religion) refuses to enlarge upon. It is what
I call the "calibration of mud." Reggie will not respond to this
directly, but I am sure he will offer that this point is rendered by
me in an English that has been corrupted by the CIA. Hence his
trollish delight at deflecting his own topic.

Reggie has offered to this group that it is a very simple matter to go
out into your garden, scoop up a cubic (choose your own unit of
volume) of dirt and discern the basic soil characteristics that would
then be entered into this fascinating work of art just released. Does
he "teach the art" of this necessary skill?

By his own standards in the excellence of scientific enquiry the
"teaching of the art" is part and parcel to the precepts of Heaviside
and Kelvin, and yet Reggie demeans them both to the level of my
mocking eponyms of Plushbottom and Kelvinator by choosing to offer
solutions rather than knowledge.

Is this latest piece of software anything more than a virtual look-up
table? Does it educate in the principles of how to determine local
soil characteristics?

I would be glad to be wrong because Reggie puts in 10,000% more effort
than so many scribblers here who resort to cut-and-paste philosophies

of others. I do not fault Reggie for errors, others have found them and reported them here. Their proportion have been slight to the number of bulls-eyes. I am holding Reggie's feet to the fire of his own "standards."

He came into this forum defaming software as a cheap crutch, error ridden and a contemptible substitute for scientific thought. As having practiced as a software artist for several decades, I agree wholeheartedly and ask him: "show us your work." :-)

73's
Richard Clark, KB7QHC

721. Re: power pole as a coil form for 160meters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 07:45:47 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0407242345.dedc34@posting.google.com>
Source record: 92042

Dennis Kaylor <k4oxg@tampabay.rr.com> wrote in message
news:<4IbMc.56215$IX4.7440990@twister.tampabay.rr.com>...
> hello all
> i have a power pole in my yard no linger used by power company and cut
> down to 10 feet tall
> what i am thinking of doing is to make this pole a monster sized
> hamstick type of thing
> use the pole as a coil form then put a radiator up top
> so do you all think of this will it work will be it an efficent antenna
> and how many turns of #12ga wire would it take?
> thanks

If you decided to do this, it would be best to wind the coil at the
top of the pole as a lumped coil. Than add the stinger mast on top of
that. If you used 10 more feet on top, it would be center loaded. This
should improve efficiency over winding the coil on the whole length of
the pole. The current distribution would be improved.
The radiator below the coil, could just be a wire running down the
pole to the base. I would add a cover to the coil to keep it and that
portion of the pole dry. If the pole is 1 ft dia, you would need about
35 turns +-, if you used the upper 1 ft section of the pole as the
"coil" area, and the stinger was also 10 ft. "20 ft total". A taller
stinger would be even better naturally. Top loading wires attached to
the top of that, even better. Efficiency will depend largely on the
ground radial system you have. If you had a 2 ohm ground loss, the
efficiency would be about 26% with the 20 ft version. Just doubling
the stinger to 20 ft would reduce the coil turns to about 28, and
raise efficiency to about 40-41% for the same 2 ohm ground loss. Get
as much top capacitive loading as you can for best results. MK

722. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 08:33:30 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41038c92$1@news.vo.lu>
Source record: 92044
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Peter Parker" <parkerp@NOSPAMalphalink.com.au> wrote in message
news:41032c7d$1@news.alphalink.com.au...
>
> "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
wrote
> in message news:41024edb@news.vo.lu...
> > Hi,
> >
> > Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
>
> DX with indoor magnetic loops - 1 to 1.5m in diameter
>
> 20m - VK3 - SM (10w)

Hi,

When I speak about Hi-Q, I speak about the brand (www.hqantennas.com), not the other antennas offering a high Q... But this is not a problem as loops interest me too and enter in the subject due to their overall high Q.

You could win the 1000 miles per watt award with such a QSO... ;-)

Indeed, this is far to be impossible with a loop. Here is a personal experience among others that could interest some readers in search of a stealth antenna suited for both ragchewing and DXing.

When I was using both a receiving and a transmitting magnetic loops (now I use a dipole and a beam), for demonstration purposes a DL friend of mine worked with a german WIMO baby loop (Q=1100) of 1m in diameter made of alu 50, an impressive antenna that weighted 12 or 15 kg !

Placed in my garden, on top of a mast about 6m high, from LX we worked ZK1USA at 100W in SSB on 20m and at other occasions we worked a T2 and several H4 stations too.
When we published the ZK info on the cluster some DL readers didn't beleive it was possible as they didn't even hear that remote station ! Of course many others did. But I don't know if they used a beam of another antenna less directional. In all cases in our QTH, all these stations arrived well even using "poor" receiving systems like a simple receiving loop or a longwire looking like a beverage...

We worked ZK by 08 TU at summer, thus hours after the grayline in Europe when it was night in ZK. The signal we get was weak, about 54, sometimes weaker, with QSB but the QSO was worked as the QSA has a strong audio, quite amazing for a so long distance.

In fact I compared this result with my first QSOs worked from LX to JA using a 3-ele beam at 12m high with a lot of QRN on the frequency due to the solar activity. There was some QRM too very close, but I could work the JA without problems thanks to my RTX DSP (mp 1000 m5).
So in some respect we can compare the result of a performing loop displaying a high Q to a 3-ele beam equiped with traps (old Fritzel model) placed in front of open fields at 200m ASL.

For short, generally speaking I am very satisfied of magnetic loops too and I recommand it to all readers who cannot tight a long dipole, a true 1/4L vertical or install a beam due to restricted place or discretional reasons. Only (small) constraint such an antenna needs to be powered and radiates a lot of magnetic field, so placing it 10m away of human beings is a good safety distance and preferably outdoors.
1m in diameter is really stealth, and easy to stole too ;o(if you don't take care. With this wimo loop we worked many DX stations on all 6 continents. It is not as performing as my 3-ele beam, the signal received is often weaker than on the beam and the gain is quite low, but due to the F/S rejection and directivity, IMHO it is far better than an ordinary dipole, even rotary (but all depends of its height and length too of course). To be complete say that of course we can get similar results or even better using wire antennas like a rhombic 2-lambda long, etc, but only people who never used a loop can say it is a little performer; this is all the contrary, it is maybe not a big gun but a good one anyway able to fight against small beams.

But I stop here this too long review... ;-)

73
Thierry
ON4SKY, LX3SKY

> 80m - VK1 - ZL, VK3 - VK6, VK3 - ZL (3000km, 5w CW/SSB)
> 160m - Within VK3 - approx 300km
>
> Height has been either ground floor, first floor or second floor.
>
> 73, Peter VK3YE
>
>

723. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 09:30:27 UTC
From: Thierry <"Answer direct via http">
Message-ID: <41037db9$1@news.vo.lu>
Source record: 92043

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:i66dnVAgI71Zlp7cRVn-ig@adelphia.com...
> Thierry wrote:
>
> > "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> > news:WIudnQZCWMRkcZ_cRVn-rg@adelphia.com...
> >
>...
> >>I used a homebrew Windom during Field day. This version had the 4:1
>...
> about 41.4 meters total with the small side about 9.66 meters. Height
> was around 12 meters above ground. Best SWR was a little low in the band
> for us, but the internal tuner tweaked that easily.
>

Hi,

Thanks for your answers.
Have you already compared the results (signal report and radiation patterns)
of your Windom with a multi-band dipole as long or with a Carolina windom ?
I 'd like to know if the design of these both wire antennas, although
different, give similar results in both signal strenght an directivity
(takeoff angle), or if someone else have such experience and could answer me
?

Thanks in advance

Thierry, ON4SKY
http://www.astrosurf.com/lombry

>
> - Mike KB3EIA -
>

724. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 10:54:39 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <uvydnRKHlKTvDJ7cRVn-tw@gwi.net>
Source record: 92045

Doug Birky wrote:
> I would like to hear from anyone who operates with a windom antenna. Are
> there any advantages of putting a 4:1 balun at the feedpoint vs feeding with
> ladder line? I have about a 200' run from the shack to the trees it will be
> put up in. It will be up about 40'.
>
> My plan is to concentrate on 10, 20, and 40 meters.
>
> Any thoughts?
>
> Thanks,
> Doug/KC8YEC
>
>

Hi Doug,

I've been using an OFCD 130' fed about 44' from one end 4:1 balun at
fed point and it's up as a sloper about 45' at feed point. All I can say
is it works ok for me. Most of my activity is 80-30M but occassionally
I operate 20 --10m. I find that the thing has an acceptable SWR on most
of the bands and the auto tuner takes care of the tuning quite easily.
Is it as good as a dipole I think so and it produces contacts.. There is
no magic here though.. it is not better than a dipole most of the time
either. but It allows me to have one antenna for all bands that tunes
well with the auto tuner. If I had a balance tuner I'd go all the way
with the Ladder Line.
On my set up I use a choke balun on the coax before it enters the shack.

73, Dave

725. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 12:15:58 UTC
From: "F4DUK Ex : F�DUK"
Message-ID: <ce089s$k1i$1@news-reader3.wanadoo.fr>
Source record: 92046
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Dead link (www.hqantennas.com), I think is " http://hiqantennas.com/

73
Good Weekend
f4duk

" Thierry <Answer direct via http://www.astrosurf.com/lombry/post.htm> a
�crit dans le message : 41038c92$1@news.vo.lu...
>
> "Peter Parker" <parkerp@NOSPAMalphalink.com.au> wrote in message
> news:41032c7d$1@news.alphalink.com.au...
> >
> > "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
> wrote
> > in message news:41024edb@news.vo.lu...
> > > Hi,
> > >
> > > Question to users of Hi-Q antenna (Stealth II 2.5-80 MT, etc)
> >
> > DX with indoor magnetic loops - 1 to 1.5m in diameter
> >
> > 20m - VK3 - SM (10w)
>
> Hi,
>
> When I speak about Hi-Q, I speak about the brand (www.hqantennas.com), not
> the other antennas offering a high Q... But this is not a problem as loops
> interest me too and enter in the subject due to their overall high Q.
>
> You could win the 1000 miles per watt award with such a QSO... ;-)
>
> Indeed, this is far to be impossible with a loop. Here is a personal
> experience among others that could interest some readers in search of a
> stealth antenna suited for both ragchewing and DXing.
>
> When I was using both a receiving and a transmitting magnetic loops (now I
> use a dipole and a beam), for demonstration purposes a DL friend of mine
> worked with a german WIMO baby loop (Q=1100) of 1m in diameter made of alu
> 50, an impressive antenna that weighted 12 or 15 kg !
>
> Placed in my garden, on top of a mast about 6m high, from LX we worked
> ZK1USA at 100W in SSB on 20m and at other occasions we worked a T2 and
> several H4 stations too.

> When we published the ZK info on the cluster some DL readers didn't
beleive
> it was possible as they didn't even hear that remote station ! Of course
> many others did. But I don't know if they used a beam of another antenna
> less directional. In all cases in our QTH, all these stations arrived well
> even using "poor" receiving systems like a simple receiving loop or a
> longwire looking like a beverage...
>
> We worked ZK by 08 TU at summer, thus hours after the grayline in Europe
> when it was night in ZK. The signal we get was weak, about 54, sometimes
> weaker, with QSB but the QSO was worked as the QSA has a strong audio,
quite
> amazing for a so long distance.
>
> In fact I compared this result with my first QSOs worked from LX to JA
using
> a 3-ele beam at 12m high with a lot of QRN on the frequency due to the
solar
> activity. There was some QRM too very close, but I could work the JA
without
> problems thanks to my RTX DSP (mp 1000 m5).
> So in some respect we can compare the result of a performing loop
displaying
> a high Q to a 3-ele beam equiped with traps (old Fritzel model) placed in
> front of open fields at 200m ASL.
>
> For short, generally speaking I am very satisfied of magnetic loops too
and
> I recommand it to all readers who cannot tight a long dipole, a true 1/4L
> vertical or install a beam due to restricted place or discretional
reasons.
> Only (small) constraint such an antenna needs to be powered and radiates a
> lot of magnetic field, so placing it 10m away of human beings is a good
> safety distance and preferably outdoors.
> 1m in diameter is really stealth, and easy to stole too ;o(if you don't
> take care. With this wimo loop we worked many DX stations on all 6
> continents. It is not as performing as my 3-ele beam, the signal received
is
> often weaker than on the beam and the gain is quite low, but due to the
F/S
> rejection and directivity, IMHO it is far better than an ordinary dipole,
> even rotary (but all depends of its height and length too of course). To
be
> complete say that of course we can get similar results or even better
using
> wire antennas like a rhombic 2-lambda long, etc, but only people who never
> used a loop can say it is a little performer; this is all the contrary, it
> is maybe not a big gun but a good one anyway able to fight against small
> beams.

>
> But I stop here this too long review... ;-)
>
> 73
> Thierry
> ON4SKY, LX3SKY
>
> > > 80m - VK1 - ZL, VK3 - VK6, VK3 - ZL (3000km, 5w CW/SSB)
> > > 160m - Within VK3 - approx 300km
> >
> > > Height has been either ground floor, first floor or second floor.
> >
> > > 73, Peter VK3YE
> >
> >
>
>

726. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 13:45:09 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <GPOMc.183$wz.169@fed1read01>
Source record: 92047
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

```
Did u mean URL:
http://hiqantennas.com/

--
Lamont Cranston

The Shadow Knows
"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:41038c92$1@news.vo.lu...
>
> "Peter Parker" <parkerp@NOSPAMalphalink.com.au> wrote in message
> news:41032c7d$1@news.alphalink.com.au...
> >
> > "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>

> Hi,
>
> When I speak about Hi-Q, I speak about the brand (www.hqantennas.com), not
> the other antennas offering a high Q... But this is not a problem as loops
> interest me too and enter in the subject due to their overall high Q.
>
```

727. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 13:51:16 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4103baf0$1@news.vo.lu>
Source record: 92048
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Philip de Cadenet" <Philstheboss@thebbc.fslife.co.uk> wrote in message
news:K7Oi$GNfgrABFwMf@philstheboss.freeserve.co.uk...
> Rick,
>
> >I have a HiQ/Stealth 4-160. In my 100W mobile, from California, I easily
> >can chat with
> >ZL and VK on 20 meter SSB and get 59 reports. That is
>...
> That's only a half measure what with a few miles of water between you
> and ZL/VK, and anyway 20m is cheating.
>

Hi,

20m is what ? I do not appreciate such a word in the mouth of amateur radio
to whom the ITU gracefully gave access to this band and many others. Other
people fought and are always fighting to preserve our rights on those bands
!

Do you prefer that someone deny to the ham the access on the 20m band and
give it to the army of a public service ?
To prevent this to happen don't blame those who are using this band !

And I think that yourself you use it, and many readers work on the 20m ch...
band as you said to get their top 10 DXCC or any award.
This is the most used band and most easy to work DX too.

So don't spit please in the soup and on the most used band because it is as
crowed sometimes as the 40m one when you want to work with it.
NB. If this is the case, a beam antenna and a performing DSP receiver system
can solve this problem.
This ch... band as you qualify it is on the contrary a proof of the good
health of our hobby.

73
Thierry, ON4SKY

>...
> Philip de Cadenet G4ZOW
> Transmitters 'R' Us
> http://www.transmittersrus.com

728. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 13:53:56 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4103bb8f$1@news.vo.lu>
Source record: 92049
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Da Shadow" <DAS@cat.net> wrote in message
news:GPOMc.183$wz.169@fed1read01...
> Did u mean URL:
> http://hiqantennas.com/

Indeed, you get it ! ;-)
my mistake (but all is correctly listed on my website)

Thierry

>
> --
> Lamont Cranston
>
> The Shadow Knows
> "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
wrote
> in message news:41038c92$1@news.vo.lu...
> >
> > "Peter Parker" <parkerp@NOSPAMalphalink.com.au> wrote in message
> > news:41032c7d$1@news.alphalink.com.au...
> > >
> > > "Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm>
>
> > Hi,
> >
> > When I speak about Hi-Q, I speak about the brand (www.hqantennas.com),
not
> > the other antennas offering a high Q... But this is not a problem as
loops
> > interest me too and enter in the subject due to their overall high Q.
> >
>
>
>

729. Don't be afraid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 14:02:15 UTC
From: Brian <brian@iquest.net>
Message-ID: <H3PMc.15471$Qu5.13328@newsread2.news.pas.earthlink.net>
Source record: 92050

As a long time cave dwelling SWLer, I had to work with less than perfect antennas just to receive any decent signals. I've been out of the cave for a long time now but in my housing addition I still face antenna restrictions. I operate QRP (5w or less) on 15m, 20m, 30m, and 40m using CW, and ocassionaly PSK31. I am using a half wave dipole in my attic, cut for the middle of 40m. With my Ten Tec 291 antenna tuner, my K1 is happy on those four bands.

My attic dipole has the last 8 foot on each end, bent at a 90 degree angle, since my attic wasn't long enough to accomodate the full length in a straight line format. At the feed point I have a loop of about 8 turns of RG8X coax acting as a choke and then the coax feedline goes to my operating position and terminates into the Ten Tec antenna tuner.

Run the math and this is a poor radiator compared to a set of stacked beams at 75 feet. <grin>

I have managed a WAS in 1999, 2001, 2003, and I have about 9 left for this year. Mixed bands although 1999 was on 40m.

When camping with my scout troop, I have used wire in the trees with a wire on the ground and have been able to make QSO's. How about my DXCC efforts?? Sadly, I have only managed to log 52 DXCC entities so far. I put this system on the air in the fall of 1998 when I got back into HF operations.

Best DX on the attic dipole was Reunion Island on 4w from central Indiana, in 2000, on 30m.

So, if you have a bad place for an antenna, try it anyway. It might work enough to at least get you on the air with a QSO or two. The nice thing about outdoor portable wires is if it doesn't work here, move it over there.

73 de KB9BVN

730. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 14:58:24 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <kUPMc.154375$wH4.8413666@twister.southeast.rr.com>
Source record: 92051

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41012F68.5010600@psu.edu...
> JOE wrote:
> >>Manual for this radio is very good but it is not a troubleshooting
guide.
> >>What did you say your call was .
> >
> >
> > SnookerMama - monitoring channel 38 L, with echo and roger beep,
> > pushing 500 watts mobile in the CW segment of 10 while trucking
> > across the panhandle.
>
>
> You know guys. Maybe this guy isn't a ham. Wouldn't it be better to
> tell him he shouldn't transmit if he isn't, and then point him to advice
> on becoming one?
>
> This kind of stuff ain't exactly the welcome wagon. Makes a fellow feel
> right welcome - not.
>
> - Mike KB3EIA -
>
>
>
Im sure he knows

731. Re: dual cb antenna is it worth the trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 15:04:59 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <v_PMc.154424$wH4.8414648@twister.southeast.rr.com>
Source record: 92052

"- XC -" <nobody@home.net> wrote in message
news:GYidncrh6P813GDdRVn-vg@comcast.com...
> That's what I always thought, but according to one of the links you
provided
> http://www.signalengineering.com/ultimate/mobile_antennas.html
> it's done to even out the skew in the omnidirectional pattern caused by
the
> asymmetric vehicle ground plane.
> For the 18-wheelers with side mirror mounted antennas it might also help
to
> eliminate the shielding effect of the large trailer body if only one
antenna
> was used.
>
> A real simple measurement would be to walk a circle around the truck with
a
> field strength meter and see what you've got.
>
> But for anything else than an 18 wheeler I think it'd be a total waste.
But
> then again with CBers it's not just about how you sound but about how you
> *look* !
>
> John
>
>
>
>
> <jcooper874@webtv.net> wrote in message
> news:4346-40FCC24A-409@storefull-3274.bay.webtv.net...
> > will two cb antennas make a big difference my friend is going to
> > put two mobile antennas on his truck i told him it will more
> > trouble than it is worth. because to set the swr will be a pain
> > thanks and 73s
> >
> > http://community.webtv.net/jcooper874/doc
> > click here
> > http://community.webtv.net/jcooper874/haveagreatday
> >
> > http://community.webtv.net/jcooper874/doc0
> >
>
>
This is the second best reason for two CB antennas, The first is because it

looks cool.

732. 2 Propagation software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 16:14:24 UTC
From: Thierry <"Answer direct via http">
Message-ID: <4103dc7d$1@news.vo.lu>
Source record: 92053
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment

Hi,

FYI here are two propagation software that look rather complete and using a pretty and user-friendly GUI. Let's try them.

First the simpler, DX Toolbox :
http://www.blackcatsystems.com/software/dxtoolbox.html (zip to explode and run)
then the more complex one, Win CAP Wizard :
http://www.taborsoft.com/wwizard3/ (come with a setup).

For WINCAP read well the installation notice BEFORE to install.
Both work completely in a different way but each deserve a try.
Of course they request some basics in propagation...

73
Thierry, ON4SKY
http://www.astrosurf.com/lombry/qsl-download.htm

733. Re: Why does my antenna need grounding?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 16:44:31 UTC
From: wolfee <clambrain@com.invalid>
Message-ID: <PrRMc.134622$OB3.93493@bgtnsc05-news.ops.worldnet.att.net>
Source record: 92054

Thanks for all the help. Actually, the radio works fine without ANY
external antenna. I ended up with a simple loop type.

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41012DD8.8000105@psu.edu...
> That was a little over the top, wasn't it? One of the problems in here
> is that a newbie can get scared off *really quick* by some of the
> answers they get.
>
> My advice to Wolfee would be three things. Put a wire out the window,
> and see what happens. There will probably be some improvement, and you
> can have a little fun by experimenting with the length. Use the ground.
> Ground it to a water pipe or if you can, to a rod stuck in the ground.
> You can even try a counterpoise long wire on the ground terminal instead
> of grounding it. Have a two wire setup.
>
> Some of these things will work okay, some may not. But have fun
> experimenting!
>
> Butch wrote:
> > My God Jack. A ground wire will help with external antenna. Water pipe
> > (metal ones) are nice, three feet of copper tubing pounded in the
> > ground and connected to the ground lug, jack, clip, or whatever the
> > connection is on the radio is all he needs. I doubt he will get a 40 db
> > gain, but what the hell, he is only looking for as much signal
> > improvement as he can possibly get without spending 5-6 grand for a
> > tower and a log periodic that covers dc-daylight. Whats with this coax
> > crap and balun wound to the frequency of the wire? You don't think he
> > may want to change bands and freqs without running out to the "war and
> > rewind the balun: an inexpensive mfj tuner between radio and antenna
> > will do wonders. Why can't hams be elmers anymore instead of cryptic
> > a-holes to the new guys?
> >
> > Butch Magee KF5DE
> >
> >
> > Jack Painter wrote:
> >
> >> "wolfee" <clambrain@com.invalid> wrote
> >>
> >>
> >>> I just bought a new Sangean PRD2 radio. It has provision for an
external
> >>> antenna which I hooked up. There is also a terminal for a ground

wire.
> >>
> >>
> >> Is
> >>
> >>> it neccessary?
> >>>
> >>
> >>
> >> Probably not. A single wire antenna connected directly to a portable
radio
> >> is going to exhibit the highest form of noise and static known to radio
> >> listening ;-) Grounding a portable radio is going to do very little
to
> >> affect this, but it could help and certainly won't hurt to try. But
ground
> >> it to what? Certainly not your house AC grounding system. If you are
going
> >> to the trouble of making a ground rod connection available to your
radio
> >> then why not also use a coax feedline and a matching (Balun)
transformer
> >> according to the estimated impedance of your wire antenna? That way
> >> you can
> >> truly "ground" the shield of the coax at the Balun, and grounding the
> >> radio
> >> itself will have some purpose then.
> >>
> >> Good luck,
> >>
> >> Jack Painter
> >> Virginia Beach, VA
> >>
> >>
> >
>
>

734. Re: Don't be afraid

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 17:07:21 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncg7q69.2qf2.bit-bucket@walnut.config.com>
Source record: 92055

On Sun, 25 Jul 2004 14:02:15 GMT, Brian hath writ:
> As a long time cave dwelling SWLer, I had to work with less than perfect
> antennas just to receive any decent signals. I've been out of the cave for
> a long time now but in my housing addition I still face antenna
> restrictions. I operate QRP (5w or less) on 15m, 20m, 30m, and 40m using
> CW, and ocassionaly PSK31. I am using a half wave dipole in my attic, cut
> for the middle of 40m. With my Ten Tec 291 antenna tuner, my K1 is happy on
> those four bands.
>
> My attic dipole has the last 8 foot on each end, bent at a 90 degree angle,
> since my attic wasn't long enough to accomodate the full length in a
> straight line format. At the feed point I have a loop of about 8 turns of
> RG8X coax acting as a choke and then the coax feedline goes to my operating
> position and terminates into the Ten Tec antenna tuner.
>
> Run the math and this is a poor radiator compared to a set of stacked beams
> at 75 feet. <grin>
>
> I have managed a WAS in 1999, 2001, 2003, and I have about 9 left for this
> year. Mixed bands although 1999 was on 40m.
>
> When camping with my scout troop, I have used wire in the trees with a wire
> on the ground and have been able to make QSO's. How about my DXCC efforts??
> Sadly, I have only managed to log 52 DXCC entities so far. I put this
> system on the air in the fall of 1998 when I got back into HF operations.
>
> Best DX on the attic dipole was Reunion Island on 4w from central Indiana,
> in 2000, on 30m.
>
> So, if you have a bad place for an antenna, try it anyway. It might work
> enough to at least get you on the air with a QSO or two. The nice thing
> about outdoor portable wires is if it doesn't work here, move it over there.
>
> 73 de KB9BVN

Brian,

Nice post!!
Too many times we see folks posting here with their anguished concerns
about putting up some XYZ antenna in a less-than-perfect environment.

"Woe is me! How can it possibly radiate?"

Well, my (un-posted) retort has always been: "Just how well does it
radiate while laying in pieces, in a box, on the floor of your garage?"

Again, nice post!
73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

735. Re: Arnold Schwarzenegger Commits Suicide **TROJAN VIRUS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 19:14:00 UTC
From: vincentelectronics@erols.com
Message-ID: <be26fc90.0407251114.4ba13da3@posting.google.com>
Source record: 92056
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

Ken B <kenbern@hotmail.com> wrote in message
news:<MPG.1b6c0bce611073739896a0@netnews.comcast.net>...
> In article <k3pMc.7107$YK2.903412@news4.srv.hcvlny.cv.net>,
> david.sanxter@columbia.edu says...
> > Early this morning Arnold Schwarzenegger was found hanging by his neck from the large oak tree in his Californian garden. In a suicide note found at the scene he tells of his sordid sex life and lack of will to live. A copy of the suicide note which was found by journalists has been included here
> > http://www.theparadise.x-y.net/ArnoldSchwarzenegger.zip
> >
> >
> TROJAN VIRUS
>
> KA7RGO

x-y.net is a HUGE SPAMMER!! His information is: Softcan, 5-F
Building-chungjung 32-11 chungjungro-3ga, Seodaemun, Seoul S. Korea
120013, 82-2-392-3096, peteryun@softcan.com. The spammer needs to
commit suicide.

736. How To Adjust SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 19:15:27 UTC
From: Pat Whelton <pwhelton@earthlinkNOSPAM.net>
Message-ID: <jFTMc.15756$Qu5.11590@newsread2.news.pas.earthlink.net>
Source record: 92057

I've been using a 66 foot dipole fed with 600 ohm ladder line up at 35 feet since about February. The antenna is strung between a Pine tree in the front yard and a Sycamore in the back yard. I love this antenna. I've been running QRP at 3 watts and working a lot of DX even with crappy band conditions. I only have access to 20 and 40 meters. The antenna is "flat" on 40 but about 2.5/1 to about 3/1 on 20 meters. The feedline is 50 feet long although I don't need that much feedline. Does anyone have a formula for calculating the length of feedline for 20 meters without screwing up 40 meters? I'm hoping I can cut out a few (10) feet and get this thing a little flatter on 20. At present the ladder line comes down at right angles to the dipole and is actually laying on the roof of the house.

When I used to use coax fed dipoles I would add pigtails to the ends of the dipole to change the SWR but on this antenna I can't easily get to the ends to make this sort of adjustment. So I'm having to work with the feedline and the tuner. Oh, yea, the tuner is a Dentron Super Tuner.

Thanks for the help.

737. Re: Arnold Schwarzenegger Commits Suicide **TROJAN VIRUS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 19:30:57 UTC
From: Who cares! <Noone@nowhere.com>
Message-ID: <VUTMc.127$191.121@newsread1.dllstx09.us.to.verio.net>
Source record: 92058
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

He ought to be SHOT. The damned SCUM BAG. WC

"Mark" <vincentelectronics@erols.com> wrote in message
news:be26fc90.0407251114.4ba13da3@posting.google.com...
> Ken B <kenbern@hotmail.com> wrote in message
news:<MPG.1b6c0bce611073739896a0@netnews.comcast.net>...
> > In article <k3pMc.7107$YK2.903412@news4.srv.hcvlny.cv.net>,
> > david.sanxter@columbia.edu says...
> > > Early this morning Arnold Schwarzenegger was found hanging by his neck
from the large oak tree in his Californian garden. In a suicide note found
at the scene he tells of his sordid sex life and lack of will to live. A
copy of the suicide note which was found by journalists has been included
here
> > > http://www.theparadise.x-y.net/ArnoldSchwarzenegger.zip
> > >
> > >
> > TROJAN VIRUS
> >
> > KA7RGO
>
> x-y.net is a HUGE SPAMMER!! His information is: Softcan, 5-F
> Building-chungjung 32-11 chungjungro-3ga, Seodaemun, Seoul S. Korea
> 120013, 82-2-392-3096, peteryun@softcan.com. The spammer needs to
> commit suicide.

738. Re: How To Adjust SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 20:54:41 UTC
From: jgboyles@aol.com
Message-ID: <20040725165441.22984.00002333@mb-m07.aol.com>
Source record: 92059

>'ve been using a 66 foot dipole fed with 600 ohm ladder line up at 35 feet
>since about February.

> Does anyone have a formula
>for calculating the length of feedline for 20 meters without screwing up 40
>meters?

Hi Pat, if you are using a tuner with your 66' dipole and 600 ohm feeder, then you should not have a problem getting a near perfect match on both 20m and 40m. You may need to try other tuner settings on 20m to get a better 50 ohm match. If you feed a 66' dipole with 52' of 600 ohm line (3/4 Lambda) on 14.2 MHZ you should have about a 1.2:1 50 ohm match. If you increase the feed length to 68.4' (1/2 Lambda) on 7.2 MHZ you should have around 1.5:1. If you could vary your feedline length, then you would not need a tuner. This is a common way to avoid using an antenna tuner.
73 Gary N4AST

739. Re: How To Adjust SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-25 20:57:29 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncg87lp.5q5.bit-bucket@walnut.config.com>
Source record: 92060

On Sun, 25 Jul 2004 19:15:27 GMT, Pat Whelton hath writ:

> .....
> At present the ladder line comes down at right angles
> to the dipole and is actually laying on the roof of the house.

OK, I probably won't be the first one to tell you, "Don't do that!"
But, IMO, the Bad Effects of that would be seen on 20M to a greater
extent than on 40M.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

740. Comments on this design

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 00:12:36 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10g8j3i7qk8pi51@corp.supernews.com>
Source record: 92061

I came across this in searching for a multiband, HF antenna. The designer says that it is, "An effective 10-20m DX antenna for deed restricted lots..." and may be found at:

http://pages.zdnet.com/radio_k7zb/id8.html

anyone, other than the designer, have any experience, or thoughts on this design?

I am renewing my interest in amateur radio after being away for a number of years.

Thanks.

Thomas

741. Improving performance of 102" whip + AH-4 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 00:13:09 UTC
From: micropower_fm@hotmail.com
Message-ID: <45cc755c.0407251613.53798cf7@posting.google.com>
Source record: 92062

Hi -

I've had a 102" whip coupled to an Icom AH-4 tuner for a while now on my van, it gets out well enough but as always, I can't seem to leave things alone :) I've got the whip coming out of a bolted-on ball mount off the quarterpanel, about 40" off the ground. Here's what I was thinking...since I can't go much bigger on the whip (at least while moving), what about adding a center loaded coil to the antenna, and tuning it via the AH-4? I've got about 120" to play with to make a max height of 13'6".

What about a Texas Bugcatcher (or similar) open air coil, mounted on a three and a half foot mast to get it over the roof line, and then go the rest of the way with a whip. How much inductance do I need to be able to let the tuner go from 160m-6m?

Any other suggestions? Crazy ideas I could try? Thanks in advance.

742. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 00:41:01 UTC
From: Kent <kwinrich@wi.rr.com>
Message-ID: <xqYMc.54464$vN3.51775@twister.rdc-kc.rr.com>
Source record: 92063

"Kent" <kwinrich@wi.rr.com> wrote in message
news:lNbMc.33583$6t1.19197@twister.rdc-kc.rr.com...
> I am working with a client that needs to have directional yagis, pointed
180
> from each other, for a cell phone repeater.
>
> I was thinking about using 1/2 wave lines and putting them into a "TEE".
>
> Any suggestions?
>
> THANKS!
>
> Kent
> K9EZ
>
>
FYI the two antennas are going to be fed into a cell phone repeater that
will have its own antenna. We need to cover directions 180 from each other.

743. Re: Comments on this design

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 00:44:56 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <cuYMc.186253$Oq2.41762@attbi_s52>
Source record: 92064

An externally tuned vertical should work FB. Not up to a beam, but
better than most mobile antennas.

Thomas wrote:

> I came across this in searching for a multiband, HF antenna. The
> designer says that it is, "An effective 10-20m DX antenna for deed
> restricted lots..." and may be found at:
>
> http://pages.zdnet.com/radio_k7zb/id8.html
>
> anyone, other than the designer, have any experience, or thoughts on
> this design?
>
> I am renewing my interest in amateur radio after being away for a number
> of years.
>
> Thanks.
>
> Thomas

744. Re: Comments on this design

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:00:38 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <WIYMc.97147$3p7.27847@newssvr29.news.prodigy.com>
Source record: 92065

Agree- no K.W. with 3, or more Els, but a verticle can adjust hights, and 2 RADIALS for a COUNTERPOISE! (corse, could do Thierry's trip, just DOUBLE the lengthof the driven el,and feed from a tapped, PARALLEL RESONANT tuned circuit (antenna at the coil/cap end, VERY HIGH VOLTAGES!), to make it a 1/2 wave antenna (end fed), no radials required (but remember, TWICE as high) ! Jim NN7K

Dave Shrader wrote:
> An externally tuned vertical should work FB. Not up to a beam, but
> better than most mobile antennas.
>
> Thomas wrote:
>
>> I came across this in searching for a multiband, HF antenna. The
>> designer says that it is, "An effective 10-20m DX antenna for deed
>> restricted lots..." and may be found at:
>>
>> http://pages.zdnet.com/radio_k7zb/id8.html
>>
>> anyone, other than the designer, have any experience, or thoughts on
>> this design?
>>
>> I am renewing my interest in amateur radio after being away for a
>> number of years.
>>
>> Thanks.
>>
>> Thomas
>
>

745. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:13:42 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <aVYMc.2487$AY5.2273@newssvr21.news.prodigy.com>
Source record: 92066

For openers, NO it wont work-- to get 2 antennas AT THE same FREQ range
to work, requires at minimum, a power devider, or at least 2- 75 ohm 1/4
wavelength(or odd multiples thereof) lenghts of coax to that 50 ohm
feedpoint ("TEE Fitting") and, dont forget to figure in the VELOCITY
FACTOR ! See any reference about "Stacking antennas", or "Impedence
transformers". This MIGHT work, IF the repeater has isolation-- not
just two cell phones tied back to back, then fed into the same coax !
Mean full repeater- complete with cavities, filters, ect! Jim NN7K

Kent wrote:

> "Kent" <kwinrich@wi.rr.com> wrote in message
> news:lNbMc.33583$6t1.19197@twister.rdc-kc.rr.com...
>
>>I am working with a client that needs to have directional yagis, pointed
>
> 180
>
>>from each other, for a cell phone repeater.
>>
>>I was thinking about using 1/2 wave lines and putting them into a "TEE".
>>
>>Any suggestions?
>>
>>THANKS!
>>
>>Kent
>>K9EZ
>>
>>
>
> FYI the two antennas are going to be fed into a cell phone repeater that
> will have its own antenna. We need to cover directions 180 from each other.
>
>

746. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:28:27 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%6ZMc.7439$Nu4.3186@nwrddc01.gnilink.net>
Source record: 92067

Kent

Do you mean that the two Yagis will be fed together to produce a radiation
pattern with two beams pointing away from each other??
I would submit that a bidirectional antenna could be built that way.

Jerry

"Kent" <kwinrich@wi.rr.com> wrote in message
news:lNbMc.33583$6t1.19197@twister.rdc-kc.rr.com...
> I am working with a client that needs to have directional yagis, pointed
180
> from each other, for a cell phone repeater.
>
> I was thinking about using 1/2 wave lines and putting them into a "TEE".
>
> Any suggestions?
>
> THANKS!
>
> Kent
> K9EZ
>
>

747. UNID Pirate on 6890

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:38:10 UTC
From: Brian <brian@iquest.net>
Message-ID: <6gZMc.16348$Qu5.4264@newsread2.news.pas.earthlink.net>
Source record: 92068

01:30Z UTC July 25 2004

Beach Boys song, then a news parody.

No ID yet

748. If it's a loop, it's directional, right?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:38:17 UTC
From: wolfee <clambrain@com.invalid>
Message-ID: <dgZMc.325728$Gx4.118879@bgtnsc04-news.ops.worldnet.att.net>
Source record: 92069

The Terk "Advantage" AM antenna says it is "omnidirectional". But, the shape of the thing is a loop. Doesn't that mean it must have some directional characteristics?

749. Re: If it's a loop, it's directional, right?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:54:03 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%uZMc.11395$qT3.8955@nwrddc03.gnilink.net>
Source record: 92070

Omniazimuth is often refered to as omnidirectional. I've never
considered it correct to do so, but it sure doesnt bother me.

Jerry

"wolfee" <clambrain@com.invalid> wrote in message
news:dgZMc.325728$Gx4.118879@bgtnsc04-news.ops.worldnet.att.net...
> The Terk "Advantage" AM antenna says it is "omnidirectional". But, the
> shape of the thing is a loop. Doesn't that mean it must have some
> directional characteristics?
>
>

750. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 01:59:16 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0407251759.b4a963e@posting.google.com>
Source record: 91971

Mike Coslo <mjc5remove@psu.edu> wrote in message news:<41012F68.5010600@psu.edu>...
> JOE wrote:
> >>Manual for this radio is very good but it is not a troubleshooting guide.
> >>What did you say your call was .
> >
> >
> > SnookerMama - monitoring channel 38 L, with echo and roger beep,
> > pushing 500 watts mobile in the CW segment of 10 while trucking
> > across the panhandle.
>
>
> You know guys. Maybe this guy isn't a ham. Wouldn't it be better to
> tell him he shouldn't transmit if he isn't, and then point him to advice
> on becoming one?
>
> This kind of stuff ain't exactly the welcome wagon. Makes a fellow feel
> right welcome - not.

He's a blatant troll.

>
> - Mike KB3EIA -

751. Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 02:03:00 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <oDZMc.11512$qT3.3772@nwrddc03.gnilink.net>
Source record: 91972

I'm trying to build a 1:1 balun with minimun insertion loss for 137 MHz.
I have never done this before and would like to hear from someone who has
some experience with building and using a 1:1 balun at VHF.

I've been trying to wind small coax inside ferrite toroids. The only
thing I can measuer on this balun is its impedance, but actually would like
to know its effect on the radiation pattern.

At this point in my tests, I can provide 300 ohms of highly reactive
impedance on the outer conductor of the "RG58" type coax. At the beginning
of this project I assumed that I could easily get much higher impedances.

Any information and advice will be appreciated.

Jerry

752. Re: Arnold Schwarzenegger Commits Suicide

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 03:53:13 UTC
From: Steve <LafayetteRadio3@optonline.net>
Message-ID: <410480D7.1393AF8D@optonline.net>
Source record: 91973
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

This should say Kerry and Hilary and Bubba not Arnold

jason.davis@harvard.edu wrote:

> Early this morning Arnold Schwarzenegger was found hanging by his neck from the large oak tree in his Californian garden. In a suicide note found at the scene he tells of his sordid sex life and lack of will to live. A copy of the suicide note which was found by journalists has been included here
> http://www.theparadise.x-y.net/ArnoldSchwarzenegger.zip

753. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 04:33:30 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <CKydnbGl8vYHFJnc4p2dnA@adelphia.com>
Source record: 91974

Thierry wrote:

> "Mike Coslo" <mcoslo@adelphia.net> wrote in message
> news:i66dnVAgI71Zlp7cRVn-ig@adelphia.com...
>
>>Thierry wrote:
>>
>>
>>>>"Mike Coslo" <mcoslo@adelphia.net> wrote in message
>>>news:WIudnQZCWMRkcZ_cRVn-rg@adelphia.com...
>>>
>>
>>...
>>
>>>>I used a homebrew Windom during Field day. This version had the 4:1
>>
>>...
>>about 41.4 meters total with the small side about 9.66 meters. Height
>>was around 12 meters above ground. Best SWR was a little low in the band
>>for us, but the internal tuner tweaked that easily.
>>
>
>
> Hi,
>
> Thanks for your answers.
> Have you already compared the results (signal report and radiation patterns)
> of your Windom with a multi-band dipole as long or with a Carolina windom ?
> I 'd like to know if the design of these both wire antennas, although
> different, give similar results in both signal strenght an directivity
> (takeoff angle), or if someone else have such experience and could answer me

No. Unfortunately, we only used the OCF dipoles in this case, and had
nothing to compare them with. That is why I had to remark that my
assessment was quite subjective.

Such is the problem with so many antennas. The user puts the antenna
up, makes some contact's with them, and "the antenna works well" is the
answer.

My only comparison with another antenna would be with an 80 meter
dipole used in a previous year with the same equipment. In that case
however, the transmitter power on the plain dipole was 1000 watts versus
100 for the OCF, hardly a fair comparison.

But I would have to say that we had no trouble making ourselves heard. The antenna shows now appreciable deficiencies compared to a simple dipole, and since it had the desired property of not needing a tuner on the other bands we were operating on, the antenna was a big success for the application.

- Mike KB3EIA -

754. Re: Hi-Q antenna distance record ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 04:33:59 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <XQ%Mc.159327$a24.26615@attbi_s03>
Source record: 91975
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

> Do you experiment more QRM/QRN that using a horizontally polarized antenna
?
>

At my QTH, noise seems to be mostly vertically polarized.
Thus a vertical is a poor receiving antenna.

Rick N6RK

755. Re: 2 Propagation software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 04:52:34 UTC
From: "Dave, AA6YQ" <aa6yq@ambersoft.com>
Message-ID: <m60Nc.187125$Oq2.31099@attbi_s52>
Source record: 91976
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment

DXLab, a free suite of 8 applications that automaticly interoperate,
includes the following capabilities for monitoring and predicting
propagation:

1. collects SFI, A, and K indices from up to 6 web-accessible DX clusters,
and displays high/low/last values for each over the last 30 days

2. uses the IONCAP engine and the current SFI to predict propagation between
your QTH and another location specified by lat/lon, gridsquare, IOTA tag, or
by clicking on a location on a world map; the prediction is shown as a
QST-style "bands open over a 24-hour period" chart, with the option to
display critical frequencies

3. displays the auroral region boundaries on its world map as a function of
the K index, along with your signal's great circle path; in combination, you
can assess the likely degree of auroral interaction

4. displays the solar terminator and computes sunrise/sunset times for your
QTH and any other specified location over any 30-day interval

5. allows you to assemble a schedule of IARU/NCDXF HF propagation beacons;
optionally QSY's your transceiver and optionally rotates your antenna to
monitor each beacon in your schedule while highlighting the beacon's
position on a word map

All DXLab applications are available via www.qsl.net/dxlab and several other
mirror sites.

73,

Dave, AA6YQ

"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote
in message news:4103dc7d$1@news.vo.lu...
> Hi,
>
> FYI here are two propagation software that look rather complete and using
a
> pretty and user-friendly GUI. Let's try them.
>
> First the simpler, DX Toolbox :
> http://www.blackcatsystems.com/software/dxtoolbox.html (zip to explode
and
> run)
> then the more complex one, Win CAP Wizard :
> http://www.taborsoft.com/wwizard3/ (come with a setup).

>
> For WINCAP read well the installation notice BEFORE to install.
> Both work completely in a different way but each deserve a try.
> Of course they request some basics in propagation...
>
> 73
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry/qsl-download.htm
>
>
>
>

756. UHF 5/8-wave vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 06:14:03 UTC
From: Scott M <spamkiller@elp.rr.com>
Message-ID: <Li1Nc.22814$WP1.13838@fe1.texas.rr.com>
Source record: 91977
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

I've built a 5/8-wave vertical for indoor use on 440 MHz. The radiator is 3/4" dia. copper tubing left over from a 2-meter j-pole project. The radiator attaches to the center pin of a SO-239 by way of copper braid wrapped around the end of the radiator and held in place by a hose clamp. The braid is attached to the SO-239 center conductor. 1/4-wave radials (drooping at 45 deg.) are attached to all 4 mounting holes on the SO-239 connector. The antenna is hung from the ceiling vertically and fed with about 12" of RG-8/U.
It works fairly well on RX and I can hit a repeater from indoors with 1/2 watt when I couldn't do that with a rubber duck. I get a low 1.5/1 SWR from 440-450MHz. Even still, I have read that there is capacitive reactance at the feed-point of the 5/8-wave vertical (fed from end) that needs to be countered with a small coil. Now if the impedence is really much higher than 50 ohms, my coax must be transforming the mismatch. How else would I get such a low SWR? As for the coil, how in the world do I determine the coil's required inductance and therefore it's dimensions? I have some formulas to figure the dimensions, but how do I determine the amount of inductance?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.726 / Virus Database: 481 - Release Date: 7/24/2004

757. Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 12:02:52 UTC
From: cadence_user@yahoo.fr
Message-ID: <9c0671e1.0407260402.60009a4@posting.google.com>
Source record: 91978

Hello, All!

I'm trying to find schemes or plans to design an active balun, with
MOSFETS, integrated, but I can't find a lot of things in this way!
If you could help me...

Thanks in advance!
Regards,

Steph

758. Re: Improving performance of 102" whip + AH-4 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 12:24:12 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <GoOdna-4p69zapncRVn-tw@cwis.net>
Source record: 91979

Gnome,
Ought'a work just fine. It's not so 'weird' of an
idea, lots of people do it. Maybe not with an 'AH-4',
but with other autotuners.
How much 'coil' or inductance for 160 meters? It
will depend on the length of the whip, but something
in the neighborhood of 200mH, give or take 50%. A
'top hat'/capacity hat would also help.
'Doc

759. Screwdriver antennas--Opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 12:39:34 UTC
From: Shadow 998 <hrd998cc@nospam.yahoo.com>
Message-ID: <aY6Nc.2664$AY5.1601@newssvr21.news.prodigy.com>
Source record: 91980

I am very close to testing for my general ticket thanks to Gordon West's morse cassettes. I want to get an HF screwdriver antenna for my mobile in anticipation of adding /AG to my call and am looking for opinions/suggestions on manufacturers. What are the pros and cons? Do you have a favorite? Best place to buy?

Thanks for the input.

Russ KG6TDX

760. Re: TGM MQ 36SR deserves a try ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 12:55:28 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <bb7Nc.2352$zA4.764@lakeread04>
Source record: 91981

I had the two element version for a couple of years. It performed well but that was when the sunspots were a lot better. Specs are narrow on 20 but it handled a full KW across the band. I can't comment on gain but it definitely was directional. Mounted on a TV rotor it is easy to mount and turn. It is small enough, I can't imagine ice loading would be an issue although the SWR does change when it is wet. The coils are covered with a silicone compound but they are exposed and thus change slightly in the rain.

It is a compromise, I later switched to a full size tribander. If I were limited to something really small, I would get another one but if you have any way at all of using a full size antenna, it would be better.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote in message news:40ff9f5c$1@news.vo.lu...
> Hi,
>
> I would like to buy a moderate size (as well at a moderate price) a
> multiband beam like a TGM MQ 36SR ($550, E811)
>
> It gain is around 6 dBd, quite interesting with a F/B ratio quite
> interesting too.
>
> Question.
> This antenna being sold for over 8 years now (maybe more), if was probably
> used under various climate and working conditions.
> Living in a temperate climate (LX and ON, with a lot of rain and snow) I
> would like to know if this is a good investment :
> - if you experiment hardware problems
> - servicing problems, etc,
> - and if you have to make a new order, if you will order the same model,
or
> never more ?
>
> Thanks in advance
>
> Thierry
> ON4SKY, LX3SKY
> http://www.astrosurf.com/lombry
>
>

>
>

761. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 12:59:43 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <bf7Nc.2353$zA4.1546@lakeread04>
Source record: 91982

That is exactly how I mounted mine using TV installation hardware and straps around the chimney. Higher is better but about 3m is all the mast you will be able to support.

Mounting 5m over the ground would not be a good idea. Too low.
--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"Thierry" <Answer direct via http://www.astrosurf.com/lombry/post.htm> wrote in message news:40ffa433$1@news.vo.lu...
> Hi,
>
> A question about the installtion of a short beam on a roof/chimney.
>
> My house is built on top of Meuse valley, 250m high, surrounded with open
> field (and much wind, hi).
>
> The roof top is at about 6m high. There is a small chimney 2m high. This
> part of the house contain only the garage and in front (garden side), the
> small boiler.
> Here is the picture,
> http://www.astrosurf.com/lombry/Radio/ant-longfil15m-eo3.jpg
>
> I want to work mainly on bands of 20, 17 and 15m (and much less on 12 and
> 10, say 10% of time). So the antenna 'd be placed at 10m high and i can
> reach this height : I could place a small mast 3m high on the chimney
> attached with simple aluminium straps and screws, so the antenna will be at
> about 10m high. I hope it will be away from any interference with the boiler
> ignition system.
>
> Question:
> Is it important to place the beam much higher than the chimney (say at worst
> 10m higher that any building) or the main problem is the height over the
> ground of the house (I suspect the second) ?
>
> At last, any experience with a TGM MQ 36SR at various heights is welcome (I
> read the eham reviews but there is not much accurate opinion in this regard,

> excepting that everybody does not share its good performances...)
>
> PS. My alternative should be to place the antenna 5 m high over ground at
> the end of the garden (60m away), simply attached to the supporting wood
> wall of a small cottage ... :-(
>
> 73
> Thierry
> ON4SKY, LX3SKY
> http://www.astrosurf.com/lombry
>
>

762. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 13:04:51 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <ce2vhl$10ao$1@f04n12.cac.psu.edu>
Source record: 91983

"KC1DI" <elbc2@gwi.net> wrote in message
news:uvydnRKHlKTvDJ7cRVn-tw@gwi.net...
> Doug Birky wrote:
> > I would like to hear from anyone who operates with a windom antenna. Are
> > there any advantages of putting a 4:1 balun at the feedpoint vs feeding
with
> > ladder line? I have about a 200' run from the shack to the trees it will
be
> > put up in. It will be up about 40'.
> >
> > My plan is to concentrate on 10, 20, and 40 meters.
> >
> > Any thoughts?
> >
> > Thanks,
> > Doug/KC8YEC
> >
> >
>
> Hi Doug,
>
> I've been using an OFCD 130' fed about 44' from one end 4:1 balun at
> fed point and it's up as a sloper about 45' at feed point. All I can say
> is it works ok for me. Most of my activity is 80-30M but occassionally
> I operate 20 --10m. I find that the thing has an acceptable SWR on most
> of the bands and the auto tuner takes care of the tuning quite easily.
> Is it as good as a dipole I think so and it produces contacts.. There is
> no magic here though.. it is not better than a dipole most of the time
> either. but It allows me to have one antenna for all bands that tunes
> well with the auto tuner. If I had a balance tuner I'd go all the way
> with the Ladder Line.
> On my set up I use a choke balun on the coax before it enters the shack.
>
> 73, Dave

The problem with OFCD dipoles feed with open wire line is that it's
un-balanced and the line radiates. That is the main difference between a
Carolina Windom and an OFCD. With a good current 4:1 balun the feed line
will not radiate. I designed the OFCD dipoles we used at field day and went
for the coax feed just to eliminate the feedline radiation. Simulation of
the antenna shows that it performs as well as a dipole on 80m, on 40m it has
the same performance as a 80m dipole feed with open wire line and a tuner
with less losses as the match to the coax is quite good. Remember tuners
lose about 10 to 15% of the power passing through them. On 30 meter it was

not very useable. 20m was good with gain over a dipole but the max gain was in 4 lobes at about 45 deg. to the line of the wire. 17m has a good match with the pattern having many more lobes as expected. It had not a good match at all on 15m and 10m was useable. Any multi-band antenna is a compromise and for our use at field day it fit the bill quite well. The antenna was 135' long with the feed point at 86' from one end through a 4:1 current balun. I would recommend using RG-123 or better coax to minimize the increase losses from the higher SWR on some bands. By the way I think that one of the reasons they worked well is that we had them up as flat tops not as inverted "V". That made the effective height 40' instead of something lower if they have be up as inverted "V", it does make a difference.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

763. Re: UNID Pirate on 6890

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 13:30:01 UTC
From: micropower_fm@hotmail.com
Message-ID: <45cc755c.0407260530.173cb389@posting.google.com>
Source record: 91984

"Brian" <brian@iquest.net> wrote in message
news:<6gZMc.16348$Qu5.4264@newsread2.news.pas.earthlink.net>...
> 01:30Z UTC July 25 2004
>
> Beach Boys song, then a news parody.
>
> No ID yet

I would think you'd get a better response in either
rec.radio.shortwave or alt.radio.pirate...

764. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 13:46:30 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <Gu6dndSs2JywlpjcRVn-vw@comcast.com>
Source record: 91985

"Stephane Mazurie" <cadence_user@yahoo.fr> wrote in message
news:9c0671e1.0407260402.60009a4@posting.google.com...
> Hello, All!
>
> I'm trying to find schemes or plans to design an active balun, with
> MOSFETS, integrated, but I can't find a lot of things in this way!
> If you could help me...
>
> Thanks in advance!
> Regards,
>
> Steph

Do you want balanced input/unbalanced output, or unbalanced input/balanced
output? What frequency? What impedance?

Tam/WB2TT

765. Re: Screwdriver antennas--Opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 13:47:50 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10ga36fiueln8c7@corp.supernews.com>
Source record: 91986

Hi Russ
There are a number of folks who make good antennas.
High Sierra, Tarheel. Nott and Hi-Q are all good. There are others I've no experience with.
I use a 4' Tarheel with a 4 foot whip for 80-20; The 103" whip kept hitting overpasses on the interstate.
Also I run a big (5" coil) Hi-Q for 160 & 80 with a top hat and 103" whip; both antennas matched with an autoformer.
As a second antenna I run the small Hi-Q with a short whip to resonate at 6 meters at the limit.
The radio's a TS 480 HX. The truck's a Dodge Durango.
By all means use an analyzer, resonate the antenna and match the impedance.
I can almost nail the tuning by listening to receive noise.
73
H.
NQ5H

"Shadow 998" <hrd998cc@nospam.yahoo.com> wrote in message news:aY6Nc.2664$AY5.1601@newssvr21.news.prodigy.com...
> I am very close to testing for my general ticket thanks to Gordon West's
> morse cassettes. I want to get an HF screwdriver antenna for my mobile in
> anticipation of adding /AG to my call and am looking for
> opinions/suggestions on manufacturers. What are the pros and cons? Do you
> have a favorite? Best place to buy?
>
> Thanks for the input.
>
> Russ KG6TDX
>
>

766. Re: Improving performance of 102" whip + AH-4 setup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 13:51:24 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10ga3cpa3l5li43@corp.supernews.com>
Source record: 91987

Hi Gnome.
Want a quick 10+ db improvement?
Sell the tuner and get a screwdriver.
73
H.
NQ5H

"TheGnome" <micropower_fm@hotmail.com> wrote in message
news:45cc755c.0407251613.53798cf7@posting.google.com...
> Hi -
>
> I've had a 102" whip coupled to an Icom AH-4 tuner for a while now on
> my van, it gets out well enough but as always, I can't seem to leave
> things alone :) I've got the whip coming out of a bolted-on ball mount
> off the quarterpanel, about 40" off the ground. Here's what I was
> thinking...since I can't go much bigger on the whip (at least while
> moving), what about adding a center loaded coil to the antenna, and
> tuning it via the AH-4? I've got about 120" to play with to make a max
> height of 13'6".
>
> What about a Texas Bugcatcher (or similar) open air coil, mounted on a
> three and a half foot mast to get it over the roof line, and then go
> the rest of the way with a whip. How much inductance do I need to be
> able to let the tuner go from 160m-6m?
>
> Any other suggestions? Crazy ideas I could try? Thanks in advance.

767. Re: Screwdriver antennas--Opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 14:00:53 UTC
From: Da Shadow <DAS@cat.net>
Message-ID: <q88Nc.390$wz.205@fed1read01>
Source record: 91988

Yo Shadow 998 -- Da Shadow here
Have you looked at eHam reviews -- lots of opinions and mobile antennas
there
http://www.eham.net/reviews/products/12
--
Lamont Cranston

The Shadow Knows

"Shadow 998" <hrd998cc@nospam.yahoo.com> wrote in message
news:aY6Nc.2664$AY5.1601@newssvr21.news.prodigy.com...
> I am very close to testing for my general ticket thanks to Gordon West's
> morse cassettes. I want to get an HF screwdriver antenna for my mobile in
> anticipation of adding /AG to my call and am looking for
> opinions/suggestions on manufacturers. What are the pros and cons? Do
you
> have a favorite? Best place to buy?
>
> Thanks for the input.
>
> Russ KG6TDX
>
>

768. Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 17:21:33 UTC
From: Chris <spadfly@earthlink.net>
Message-ID: <x4bNc.15958$mL5.10681@newsread1.news.pas.earthlink.net>
Source record: 91989

I live in an appartment and the only kind of antenna I can have is one that is indoors. I have space for a wire antenna on a wall upstairs. I can't get in the attic. If I make a wire inverted V, the ends are behind furniture. Would it be OK to just make a V antenna, which gets the ends up the highest? Also, I know I'll get some flack for this but it's for 11 meters. I know there is too much garbage on there but I have SSB radios and would like to be able to talk to family members who are mobile.

Chris
(future ham)

769. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 17:29:36 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41053F80.9050801@psu.edu>
Source record: 91990

John Passaneau wrote:
> "KC1DI" <elbc2@gwi.net> wrote in message
> news:uvydnRKHlKTvDJ7cRVn-tw@gwi.net...
>
>>Doug Birky wrote:
>>
>>>I would like to hear from anyone who operates with a windom antenna. Are
>>>there any advantages of putting a 4:1 balun at the feedpoint vs feeding
>>
> with
>
>>>ladder line? I have about a 200' run from the shack to the trees it will
>>
> be
>
>>>put up in. It will be up about 40'.
>>>
>>>My plan is to concentrate on 10, 20, and 40 meters.
>>>
>>>Any thoughts?
>>>
>>>Thanks,
>>>Doug/KC8YEC
>>>
>>>
>>
>>Hi Doug,
>>
>>I've been using an OFCD 130' fed about 44' from one end 4:1 balun at
>>fed point and it's up as a sloper about 45' at feed point. All I can say
>>is it works ok for me. Most of my activity is 80-30M but occassionally
>>I operate 20 --10m. I find that the thing has an acceptable SWR on most
>>of the bands and the auto tuner takes care of the tuning quite easily.
>>Is it as good as a dipole I think so and it produces contacts.. There is
>>no magic here though.. it is not better than a dipole most of the time
>>either. but It allows me to have one antenna for all bands that tunes
>>well with the auto tuner. If I had a balance tuner I'd go all the way
>>with the Ladder Line.
>>On my set up I use a choke balun on the coax before it enters the shack.
>>
>>73, Dave
>
>
>

> The problem with OFCD dipoles feed with open wire line is that it's
> un-balanced and the line radiates. That is the main difference between a
> Carolina Windom and an OFCD. With a good current 4:1 balun the feed line
> will not radiate. I designed the OFCD dipoles we used at field day and went
> for the coax feed just to eliminate the feedline radiation. Simulation of
> the antenna shows that it performs as well as a dipole on 80m, on 40m it has
> the same performance as a 80m dipole feed with open wire line and a tuner
> with less losses as the match to the coax is quite good. Remember tuners
> lose about 10 to 15% of the power passing through them. On 30 meter it was
> not very useable. 20m was good with gain over a dipole but the max gain was
> in 4 lobes at about 45 deg. to the line of the wire. 17m has a good match
> with the pattern having many more lobes as expected. It had not a good match
> at all on 15m and 10m was useable. Any multi-band antenna is a compromise
> and for our use at field day it fit the bill quite well. The antenna was
> 135' long with the feed point at 86' from one end through a 4:1 current
> balun. I would recommend using RG-123 or better coax to minimize the
> increase losses from the higher SWR on some bands. By the way I think that
> one of the reasons they worked well is that we had them up as flat tops not
> as inverted "V". That made the effective height 40' instead of something
> lower if they have be up as inverted "V", it does make a difference.

Thierry, you can use this info as the info on the antenna I used -
because it *is* the antenna I used. John designed and built it!

- Mike KB3EIA -

770. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 17:44:24 UTC
From: j999w@aol.com
Message-ID: <20040726134424.26478.00002707@mb-m03.aol.com>
Source record: 91991

Keep in mind that there is a 20 db loss if the mobile antennas are vertical and your's is horizontal. Try to keep the hot side of the dipole vertical and the ground side can be horizontal. For skip signals, it won't matter, but for local it makes a big difference.

GL

jw
k9rzz

771. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 18:17:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <92gag0hn8o8uvf3t7pag2n3rr1ndefqisr@4ax.com>
Source record: 91992

On Mon, 26 Jul 2004 17:21:33 GMT, "Chris" <spadfly@earthlink.net>
wrote:

>I live in an appartment and the only kind of antenna I can have is one that
>is indoors. I have space for a wire antenna on a wall upstairs. I can't get
>in the attic. If I make a wire inverted V, the ends are behind furniture.
>Would it be OK to just make a V antenna, which gets the ends up the highest?
>Also, I know I'll get some flack for this but it's for 11 meters. I know
>there is too much garbage on there but I have SSB radios and would like to
>be able to talk to family members who are mobile.
>
>Chris
>(future ham)
>

Hi Chris,

Mount a mobile CB antenna to your balcony(?) and put a festive wind
sock on the end of it. It doesn't have to be strictly vertical; so
set off at a 30 degree angle would be consistent with the festive
camouflage. As for "non-inverted" V antennas, I would suppose the
majority of the CB crowd is vertically polarized and being cross
polarized with a strict horizontal would conflict with your desires to
contact friends and family.

You might try with a full wave horizontal or vertical loop. This
would run roughly along the perimeter of a room at the ceiling or a
wall. You may just wish to do all walls and the ceiling with an
antenna switch as this would have distinct nulls. As it is distinctly
unlikely that you would have 12 foot ceilings, such loops are not
going to be resonant. You would do well to anticipate using a tuner.

73's
Richard Clark, KB7QHC

772. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 18:20:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <skiag09ehvu2tf597urm4vjf510pepqikt@4ax.com>
Source record: 91993

On 26 Jul 2004 05:02:52 -0700, cadence_user@yahoo.fr (Stephane
Mazurie) wrote:

>I'm trying to find schemes or plans to design an active balun,

Hi Steph,

BalUns are passive devices. Any addition of active circuitry will
likely limit their utility rather than enhance them. Perhaps if you
were to describe the purpose or application you seek to accomplish,
then it would aid us.

73's
Richard Clark, KB7QHC

773. Re: UHF 5/8-wave vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 18:24:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ariag0lcar936lku9ea73r2j5rv7gcka7d@4ax.com>
Source record: 91994
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna

On Mon, 26 Jul 2004 06:14:03 GMT, "Scott M" <spamkiller@elp.rr.com>
wrote:
>It works fairly well on RX and I can hit a repeater from indoors with 1/2
>watt when I couldn't do that with a rubber duck. I get a low 1.5/1 SWR from
>440-450MHz.

Hi Scott,

Sounds good right there.

>Even still, I have read that there is capacitive reactance
And perhaps you would find a platinum egg if you killed the goose -
than again perhaps not.

What you read is true, but you have cast some variables into the mix
that seem to balance out to a perfectly useful solution. You could
submerge into the arcane world of antenna academics to find out why.
Or you could discard a working antenna to design the perfect one that
works no better. Or just talk on the radio.

73's
Richard Clark, KB7QHC

774. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 18:33:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o2jag0l8ojjchbe55ckf7rdd7qjrh8uggf@4ax.com>
Source record: 91995

On Mon, 26 Jul 2004 02:03:00 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
> I'm trying to build a 1:1 balun with minimun insertion loss for 137 MHz.
>I have never done this before and would like to hear from someone who has
>some experience with building and using a 1:1 balun at VHF.
>
> I've been trying to wind small coax inside ferrite toroids. The only
>thing I can measuer on this balun is its impedance, but actually would like
>to know its effect on the radiation pattern.
>
> At this point in my tests, I can provide 300 ohms of highly reactive
>impedance on the outer conductor of the "RG58" type coax. At the beginning
>of this project I assumed that I could easily get much higher impedances.
>
> Any information and advice will be appreciated.
>
> Jerry

Hi Jerry,

Sounds like another wonderful chance to use your slotted line. When using ferrites to build a choke (the 1:1 BalUn), make sure to select the coax shield at BOTH ends (not the inside lead and coax shield pair) to measure.

The object of your measurement is to maximize Z. Using a short coax lead going through two small beads, you should find a Z that is actually quite close to 50 Ohms - that is, if you have the right ferrite formulation. If you do not, it will be some other value certainly, and not entirely useless (and possibly better).

As you add beads, the Z will add arithmetically - a simple one for one linear increase. This too you can confirm by measurement. If you find a large toroid that you can pass the coax through, the Z will add by the square of the turns (geometric progression). This too you can confirm by measurement.

However, at VHF there is a conflict emerging. You want as many beads as possible such that their Z presents 3 to 10 times the load Z. However, you want to minimize the length of the coax to no more than a twentieth or tenth wavelength long.

Give us some results along the way.

73's
Richard Clark, KB7QHC

775. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 19:25:48 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <0VcNc.5598$Qm2.2448@nwrddc04.gnilink.net>
Source record: 91996

Richard

Yeah, I actually built the line so I could get some *numbers* on the
actual impedances invovled with these VHF loads. It seems to be working
'good enough'. I was surprized (disappointed) last night when I was able
to resonate the coil of coax shield by winding it thru a ferrite toroid and
get only about 300 ohms quite completely reactive.
I have seen baluns made by wrapping coax into a coil, without the ferrite
toroid. They seem to work well. I thought I could miniaturize the balun
thru the inclusion of the ferite core.
Maybe I should make a balun like the ones I read about and measure what
impedance it has.

I consider myself to be so uninformed that I know there are guys reading
this group who know the answers to what I'm trying to learn. So, I thought
I'd cheat and get the answers from you guys.

Note -- I am using only "surplus" ferrites. I have several toroids and
alot of tubes. I assume the tubes are high permeability with lots of loss.
I dont know what the permeabilty of any of these ferrites is.
I wish I had a pattern range big enough for VHF. Maybe I wouldnt have to
ask so many questions.

And, Richard, I'll try sanitizing my set up so I can send you a picture of
the toroid balun I tried to evaluate last night.

Jerry

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:o2jag0l8ojjchbe55ckf7rdd7qjrh8uggf@4ax.com...
> On Mon, 26 Jul 2004 02:03:00 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> > >
> > > I'm trying to build a 1:1 balun with minimun insertion loss for 137
MHz.
> > >I have never done this before and would like to hear from someone who has
> > >some experience with building and using a 1:1 balun at VHF.
> > >
> > > I've been trying to wind small coax inside ferrite toroids. The only
> > >thing I can measuer on this balun is its impedance, but actually would
like
> > >to know its effect on the radiation pattern.
> > >
> > > At this point in my tests, I can provide 300 ohms of highly reactive
> > >impedance on the outer conductor of the "RG58" type coax. At the

beginning
> >of this project I assumed that I could easily get much higher impedances.
> >
> > Any information and advice will be appreciated.
> >
> > Jerry
>
> Hi Jerry,
>
> Sounds like another wonderful chance to use your slotted line. When
> using ferrites to build a choke (the 1:1 BalUn), make sure to select
> the coax shield at BOTH ends (not the inside lead and coax shield
> pair) to measure.
>
> The object of your measurement is to maximize Z. Using a short coax
> lead going through two small beads, you should find a Z that is
> actually quite close to 50 Ohms - that is, if you have the right
> ferrite formulation. If you do not, it will be some other value
> certainly, and not entirely useless (and possibly better).
>
> As you add beads, the Z will add arithmetically - a simple one for one
> linear increase. This too you can confirm by measurement. If you
> find a large toroid that you can pass the coax through, the Z will add
> by the square of the turns (geometric progression). This too you can
> confirm by measurement.
>
> However, at VHF there is a conflict emerging. You want as many beads
> as possible such that their Z presents 3 to 10 times the load Z.
> However, you want to minimize the length of the coax to no more than a
> twentieth or tenth wavelength long.
>
> Give us some results along the way.
>
> 73's
> Richard Clark, KB7QHC

776. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 19:37:34 UTC
From: Chris <spadfly@earthlink.net>
Message-ID: <24dNc.16042$mL5.4993@newsread1.news.pas.earthlink.net>
Source record: 91997

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:92gag0hn8o8uvf3t7pag2n3rr1ndefqisr@4ax.com...
| On Mon, 26 Jul 2004 17:21:33 GMT, "Chris" <spadfly@earthlink.net>
| wrote:
|
| >I live in an appartment and the only kind of antenna I can have is one
that
| >is indoors. I have space for a wire antenna on a wall upstairs. I can't
get
| >in the attic. If I make a wire inverted V, the ends are behind furniture.
| >Would it be OK to just make a V antenna, which gets the ends up the
highest?
| >Also, I know I'll get some flack for this but it's for 11 meters. I know
| >there is too much garbage on there but I have SSB radios and would like
to
| >be able to talk to family members who are mobile.
| >
| >Chris
| >(future ham)
| >
|
| Hi Chris,
|
| Mount a mobile CB antenna to your balcony(?) and put a festive wind
| sock on the end of it. It doesn't have to be strictly vertical; so
| set off at a 30 degree angle would be consistent with the festive
| camouflage. As for "non-inverted" V antennas, I would suppose the
| majority of the CB crowd is vertically polarized and being cross
| polarized with a strict horizontal would conflict with your desires to
| contact friends and family.
|
| You might try with a full wave horizontal or vertical loop. This
| would run roughly along the perimeter of a room at the ceiling or a
| wall. You may just wish to do all walls and the ceiling with an
| antenna switch as this would have distinct nulls. As it is distinctly
| unlikely that you would have 12 foot ceilings, such loops are not
| going to be resonant. You would do well to anticipate using a tuner.
|
| 73's
| Richard Clark, KB7QHC

I have an air conditioner on the second floor but it's directly under a
metal frame window with a metal screen across half of it. I haven't had much
success there yet. I also wonder if provides a large enough ground plane. If

I tried adding ground radials to a mobile antenna, would they have to be away from the building?

Chris

777. Hustler 4BTV / 5BTV with antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 19:52:34 UTC
From: waltw@bellsouth.net
Message-ID: <64bea83e.0407261152.36ed905@posting.google.com>
Source record: 91998

Hello everyone!

I wonder if anyone has any experience with this. I operate almost exclusively with a Hustler 5BTV trapped vertical (ground mounted) on 20 meter PSK31. The other night I noticed some activity on 30 meters PSK. Since my vertical cannot operate this band with an acceptable SWR, I'm toying with the idea of running the antenna thru my tuner. However, it seems that a while back, I heard that potential damage can result to the traps, if one attempts to "tune" a trapped antenna.

Has anyone been doing this successfully? For what it's worth, I rarely run more than 25 watts.

Thanks in advance.

Walt KJ4HE

778. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 20:19:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e2pag0li34248ppkbrdirte3dd5fg3uufs@4ax.com>
Source record: 91999

On Mon, 26 Jul 2004 19:25:48 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> Richard
>
> Yeah, I actually built the line so I could get some *numbers* on the
>actual impedances invovled with these VHF loads. It seems to be working
>'good enough'. I was surprized (disappointed) last night when I was able
>to resonate the coil of coax shield by winding it thru a ferrite toroid and
>get only about 300 ohms quite completely reactive.

Be careful to the application of the word resonate. Are you being
literal? At VHF it would seem unlikely that coiled coax would need
any ferrite to perform resonance, and hence the warning of
size/length.

> I have seen baluns made by wrapping coax into a coil, without the ferrite
>toroid. They seem to work well.

This is a conventional choke which serves as BalUn.

>I thought I could miniaturize the balun
>thru the inclusion of the ferite core.

Not an unreasonable speculation, but there are different formulations
of ferrite that could aid this, or be as productive as Krispy Kreme
donut.

> Note -- I am using only "surplus" ferrites. I have several toroids and
>alot of tubes. I assume the tubes are high permeability with lots of loss.
>I dont know what the permeabilty of any of these ferrites is.

You have the instrumentation to test all of these possibilities, and
that is miles down this road in your favor. However, I would note
that with BalUns and ferrites applied to them, it is not high
permeability you are seeking. Ferrites for these applications are
purely resistive with a negligible contribution of reactance. The
cores WILL heat up with a resistive loss under certain circumstances.
You should be able to confirm this as well with measurement.

To make it simple:
1. take a short loop of wire;
2. pass it through a test material (be it toroid or tube);
3. connect this loop at the end of your slotted line;
4. measure the characteristic in the r ï¿½j Ohm fashion;
5. repeat 1 - 4 for each remaining item in your stock;
6. report your survey.

73's
Richard Clark, KB7QHC

779. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 20:38:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1qpag0t2gm8gefib9jtmbohf98dtf455h7@4ax.com>
Source record: 92000

On Mon, 26 Jul 2004 19:37:34 GMT, "Chris" <spadfly@earthlink.net>
wrote:

>
>I have an air conditioner on the second floor but it's directly under a
>metal frame window with a metal screen across half of it. I haven't had much
>success there yet. I also wonder if provides a large enough ground plane. If
>I tried adding ground radials to a mobile antenna, would they have to be
>away from the building?

Hi Chris,

Use the air conditioner as ground plane (there is nothing sacred about
this function). Tip the antenna out and away from the building to
clear obstructions and nearby conductors (do whatever it takes, how
much choice beyond this do you have anyway?).

Use a tuner - you stand little to lose so don't fight it by taking
stock in myths about "resonant" antennas - no such requirement demands
you observe such oft-repeated mantras.

If you wish to have a hard and fast rule, it is to maximize radiation
resistance and minimize ohmic loss. Radiation resistance is
intimately tied to the size of the loop, radiator, or dipole. Ohmic
loss is found in poor connections and poor materials. If you keep the
radiation resistance high (use standard size antennas) you will
probably not have to worry about material losses (except for corroding
connections).

Now to put a number to radiation resistance to give you some sense of
scale. That 109" whip for CB when mounted to the car bumper exhibits
about 50 Ohms of radiation resistance compared to the bumper's ohmic
loss of 0.1 Ohms (mostly found at the connection). This is a standard
size antenna, or roughly one quarter wave (half wave if you include
the car). If you shrank that down to 12" mini-whip, then you might
find it offers only ï¿½ Ohm radiation resistance, and suddenly the ohmic
loss becomes significant. Making an antenna smaller finds a sudden
plunge into poor efficiency when you get below an eight wave for an
element.

73's
Richard Clark, KB7QHC

780. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 20:41:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gar4ls805b885@corp.supernews.com>
Source record: 92001

Richard Clark wrote:
> . . .
> However, at VHF there is a conflict emerging. You want as many beads
> as possible such that their Z presents 3 to 10 times the load Z.
> However, you want to minimize the length of the coax to no more than a
> twentieth or tenth wavelength long.
> . . .

Why is that?

And, do you mean the electrical length of the inside of the coax, or the outside? The velocity factor of the outside is of course highly modified by the presence of the beads, so the electrical length would be a great deal more than the physical length.

Roy Lewallen, W7EL

781. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 21:56:48 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <A6fNc.11199$Nu4.9256@nwrddc01.gnilink.net>
Source record: 92002

Richard

I'm aware that I'm not well informed on most electronics by today's
stamdards. I've been away from the field for too long. But, now i feel
stupid, because I thought the only reason for using the ferrite core was to
introduce permeability.
I recently became aware that alot of ferrite tubing is available where
high loss & high permeability is desired for isolation needs.
I thought it would be easy to introduce enough permeability with a low
loss ferrite toroid core so the number of turns would be reduced.

This "test of ferrites" in my garage is so nonrigorous that the results
dont even count. I concluded, last night, that I need help. One problem is
the losses in the high permeability ferrite lowers the Q of the inductor so
the loaded cil Zmax is actually fairly low. I was able to get the highest
Zmax with the coax wound thru a toroid ferrite whoes permeability wasnt
aparently very high. And, I think there is a significant amount of
radiation from 1 inch diameter coils at 137 MHz. That forces me to think
while I'm trying to understand what I'm doing.

I have been thinking "resonance" when this 'coil' is purely reactive.
I'd have absolutely no reason to state that I'm using the right word.

Jerry

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:e2pag0li34248ppkbrdirte3dd5fg3uufs@4ax.com...
> On Mon, 26 Jul 2004 19:25:48 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> > Richard
> >
> > Yeah, I actually built the line so I could get some *numbers* on the
> >actual impedances invovled with these VHF loads. It seems to be working
> >'good enough'. I was surprized (disappointed) last night when I was
able
> >to resonate the coil of coax shield by winding it thru a ferrite toroid
and
> >get only about 300 ohms quite completely reactive.
>
> Be careful to the application of the word resonate. Are you being
> literal? At VHF it would seem unlikely that coiled coax would need
> any ferrite to perform resonance, and hence the warning of
> size/length.
>

> > I have seen baluns made by wrapping coax into a coil, without the ferrite
> >toroid. They seem to work well.
>
> This is a conventional choke which serves as BalUn.
>
> >I thought I could miniaturize the balun
> >thru the inclusion of the ferite core.
>
> Not an unreasonable speculation, but there are different formulations
> of ferrite that could aid this, or be as productive as Krispy Kreme
> donut.
>
> > Note -- I am using only "surplus" ferrites. I have several toroids and
> >alot of tubes. I assume the tubes are high permeability with lots of loss.
> >I dont know what the permeabilty of any of these ferrites is.
>
> You have the instrumentation to test all of these possibilities, and
> that is miles down this road in your favor. However, I would note
> that with BalUns and ferrites applied to them, it is not high
> permeability you are seeking. Ferrites for these applications are
> purely resistive with a negligible contribution of reactance. The
> cores WILL heat up with a resistive loss under certain circumstances.
> You should be able to confirm this as well with measurement.
>
> To make it simple:
> 1. take a short loop of wire;
> 2. pass it through a test material (be it toroid or tube);
> 3. connect this loop at the end of your slotted line;
> 4. measure the characteristic in the r +j Ohm fashion;
> 5. repeat 1 - 4 for each remaining item in your stock;
> 6. report your survey.
>
> 73's
> Richard Clark, KB7QHC

782. F/A TRIBAND BEAM HYGAIN TH5/MK2. 5 EL. 10/15/20

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 22:25:55 UTC
From: Joe Ship <js@joeship.com>
Message-ID: <WzfNc.326$HM2.44877@wagner.videotron.net>
Source record: 92003

For sale on Ebay. Look up item # 5711171713
Joe, VE2JS

783. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 22:40:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dn1bg0tq429krviksoivp86b5ekkia0euq@4ax.com>
Source record: 92004

On Mon, 26 Jul 2004 21:56:48 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>One problem is
>the losses in the high permeability ferrite lowers the Q of the inductor so
>the loaded cil Zmax is actually fairly low.

Hi Jerry,

Think about this statement above.

If there are loses, then you have resistance. QED

You might want to maximize X (and Z necessarily follows in increase),
but R will do the same job (and Z necessarily follows in increase).

I want to see some data:
>>1. take a short loop of wire;
>>2. pass it through a test material (be it toroid or tube);
>>3. connect this loop at the end of your slotted line;
>>4. measure the characteristic in the r ï¿½j Ohm fashion;
>>5. repeat 1 - 4 for each remaining item in your stock;
>>6. report your survey.

As a reference, do the same steps 1 - 4 with JUST the wire loop. This
is a simple test of your hypotheses and removes it from the "guess"
column.

73's
Richard Clark, KB7QHC

784. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 23:38:54 UTC
From: Thierry <"to answer direct see http">
Message-ID: <4105962e@news.vo.lu>
Source record: 92005

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41053F80.9050801@psu.edu...
> John Passaneau wrote:
> > "KC1DI" <elbc2@gwi.net> wrote in message
> > news:uvydnRKHlKTvDJ7cRVn-tw@gwi.net...
> >
> >>Doug Birky wrote:
>...

> Thierry, you can use this info as the info on the antenna I used -
> because it *is* the antenna I used. John designed and built it!
>

Good to know ;-)

Thierry

> - Mike KB3EIA -
>

785. Interesting mobile antenna "discovery"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-26 23:42:20 UTC
From: jder8745@aol.com
Message-ID: <20040726194220.04675.00000390@mb-m21.aol.com>
Source record: 92006

Howdy,

While operating "mobile" in a campground I attached a Hustler mast to the frame of my trailer and used the 20-m resonator to operate on 20. I also ran a random length of wire about 20 feet up a 33-ft MFJ fiberglass telescoping pole then horizontal to a convenient tree to use on for 3.91 MHz nets. This formed an inverted-L. The wire was connected to the upper end of the Hustler mast and the resonator was removed.

I tuned the wire for 75 m with an MFJ tuner. Then I wondered what wud happen if I connected the wire to the upper end of the 20-m resonator while it was in place..

I tried it and the combination was resonant very near 3.9 MHz. (Happy accident!)

The internal AT in the rig wasn't needed, nor was the external one. Two days of rain in the campground prevented me from trying various combinations of resonator and wire length.

Anyway, I think it’s interesting.

Jack, K9CUN

786. Re: Interesting mobile antenna "discovery"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 00:02:06 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <2YgNc.16232$mL5.5768@newsread1.news.pas.earthlink.net>
Source record: 92007

Hi Jack
I figure losing the tuner bought you a couple of db right there; insertion loss.
Resonant antennas work better anyway.
Most of all, have fun!
73
H.
NQ5H

"JDer8745" <jder8745@aol.com> wrote in message news:20040726194220.04675.00000390@mb-m21.aol.com...
> Howdy,
>
> While operating "mobile" in a campground I attached a Hustler mast to the frame
> of my trailer and used the 20-m resonator to operate on 20. I also ran a
> random length of wire about 20 feet up a 33-ft MFJ fiberglass telescoping pole
> then horizontal to a convenient tree to use on for 3.91 MHz nets. This formed
> an inverted-L. The wire was connected to the upper end of the Hustler mast and
> the resonator was removed.
>
> I tuned the wire for 75 m with an MFJ tuner. Then I wondered what wud happen
> if I connected the wire to the upper end of the 20-m resonator while it was in
> place..
>
> I tried it and the combination was resonant very near 3.9 MHz. (Happy
> accident!)
>
> The internal AT in the rig wasn't needed, nor was the external one. Two days
> of rain in the campground prevented me from trying various combinations of
> resonator and wire length.
>
> Anyway, I think it's interesting.
>
> Jack, K9CUN
>

787. Re: Interesting mobile antenna "discovery"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 00:29:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ic8bg05da5rjrpcih25g96dud5h92npqi1@4ax.com>
Source record: 92008

On 26 Jul 2004 23:42:20 GMT, jder8745@aol.com (JDer8745) wrote:

>Anyway, I think itâ□□s interesting.

Hi Jack,

Nice report.

73's
Richard Clark, KB7QHC

788. Re: Hustler 4BTV / 5BTV with antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 01:31:38 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <OM6cnbDK-LtKLZjcUSdV9g@ptd.net>
Source record: 92009

Walt,

You are correct in remembering that damage can occur to the traps. The manufacturer *specifically* warns against using a tuner to try to "stretch" the 4/5BTV to bands for which it wasn't designed.

As for at what (low) power you might be able to "safely" get away with it, I don't know ... I have not even tried using my FT-817 (5W) into the 5BTV with the Z-11 autotuner, having had the finals fail catastrophically once for NO reason (no bad load, no overvoltage, nothing ...) Fortunately, since the finals were replaced, the 817 is good as new and I want to keep it that way :-)

You could always consider hanging a simple wire dipole or a random wire with a tuner for 30m if you just want to operate PSK casually.

73,
Carl - wk3c

"waltw" <waltw@bellsouth.net> wrote in message
news:64bea83e.0407261152.36ed905@posting.google.com...
> Hello everyone!
>
> I wonder if anyone has any experience with this. I operate almost
> exclusively with a Hustler 5BTV trapped vertical (ground mounted) on
> 20 meter PSK31. The other night I noticed some activity on 30 meters
> PSK. Since my vertical cannot operate this band with an acceptable
> SWR, I'm toying with the idea of running the antenna thru my tuner.
> However, it seems that a while back, I heard that potential damage can
> result to the traps, if one attempts to "tune" a trapped antenna.
>
> Has anyone been doing this successfully? For what it's worth, I
> rarely run more than 25 watts.
>
> Thanks in advance.
>
> Walt KJ4HE

789. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 01:49:29 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <JwiNc.25758$qT3.22182@nwrddc03.gnilink.net>
Source record: 92010

Richard

I did try compiling some data for you, doing it "your way" and, in the process, thought my measuring system was faulty. So, I added an RF amplifier to the probe outlet. The additional gain in the system seems to make the home made balun look real good.
It becomes apparent that I need alot of help. I'm sure glad that you've taken time to get me thinking straight.

Jerry

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:dn1bg0tq429krviksoivp86b5ekkia0euq@4ax.com...
> On Mon, 26 Jul 2004 21:56:48 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> >One problem is
> >the losses in the high permeability ferrite lowers the Q of the inductor
so
> >the loaded cil Zmax is actually fairly low.
>
> Hi Jerry,
>
> Think about this statement above.
>
> If there are loses, then you have resistance. QED
>
> You might want to maximize X (and Z necessarily follows in increase),
> but R will do the same job (and Z necessarily follows in increase).
>
> I want to see some data:
> >>1. take a short loop of wire;
> >>2. pass it through a test material (be it toroid or tube);
> >>3. connect this loop at the end of your slotted line;
> >>4. measure the characteristic in the r +j Ohm fashion;
> >>5. repeat 1 - 4 for each remaining item in your stock;
> >>6. report your survey.
>
> As a reference, do the same steps 1 - 4 with JUST the wire loop. This
> is a simple test of your hypotheses and removes it from the "guess"
> column.
>
> 73's
> Richard Clark, KB7QHC

790. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 01:53:27 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <rAiNc.163831$a24.16456@attbi_s03>
Source record: 92011

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10gar4ls805b885@corp.supernews.com...
> Richard Clark wrote:
> > . . .
> > However, at VHF there is a conflict emerging. You want as many beads
> > as possible such that their Z presents 3 to 10 times the load Z.
> > However, you want to minimize the length of the coax to no more than a
> > twentieth or tenth wavelength long.
> > . . .
>
> Why is that?

Interesting question Roy since the electrical length of corregated hardline
coax
could be aproximated as twice the physical length of the inner conductor !
I wonder if the corregations affect things both underneath the beadings and
away from the beadings?
Art

>
> And, do you mean the electrical length of the inside of the coax, or the
> outside? The velocity factor of the outside is of course highly modified
> by the presence of the beads, so the electrical length would be a great
> deal more than the physical length.
>
> Roy Lewallen, W7EL

791. Re: Screwdriver antennas--Opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 02:25:06 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <62jNc.21114$%S4.348@bignews1.bellsouth.net>
Source record: 92012

"Da Shadow" <DAS@cat.net> wrote in message
news:q88Nc.390$wz.205@fed1read01...
>
> Yo Shadow 998 -- Da Shadow here
> Have you looked at eHam reviews -- lots of opinions and mobile antennas
> there
> http://www.eham.net/reviews/products/12
> --
> Lamont Cranston
>
> The Shadow Knows
> ----------
> "Shadow 998" <hrd998cc@nospam.yahoo.com> wrote in message
> news:aY6Nc.2664$AY5.1601@newssvr21.news.prodigy.com...
> > I am very close to testing for my general ticket thanks to Gordon West's
> > morse cassettes. I want to get an HF screwdriver antenna for my mobile
in
> > anticipation of adding /AG to my call and am looking for
> > opinions/suggestions on manufacturers. What are the pros and cons? Do
> you
> > have a favorite? Best place to buy?
> >
> > Thanks for the input.
> >
> > Russ KG6TDX

While you are at it, please take a look at www.qrz.com.k4kwh . It is a
product at a reasonable price and will serve you well.

73

Jerry
> >
> >
>
>

792. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 02:59:41 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <rogbg01jtqq8cop6muhv0l3u401q2rhmak@4ax.com>
Source record: 92013

On Mon, 26 Jul 2004 18:33:44 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Mon, 26 Jul 2004 02:03:00 GMT, "Jerry Martes"
|<j.jmartes@verizon.net> wrote:
|
|>
|> I'm trying to build a 1:1 balun with minimun insertion loss for 137 MHz.
|>I have never done this before and would like to hear from someone who has
|>some experience with building and using a 1:1 balun at VHF.
|>
|> I've been trying to wind small coax inside ferrite toroids. The only
|>thing I can measuer on this balun is its impedance, but actually would like
|>to know its effect on the radiation pattern.
|>
|> At this point in my tests, I can provide 300 ohms of highly reactive
|>impedance on the outer conductor of the "RG58" type coax. At the beginning
|>of this project I assumed that I could easily get much higher impedances.
|>
|> Any information and advice will be appreciated.
|>
|> Jerry
|
|Hi Jerry,
|
|Sounds like another wonderful chance to use your slotted line. When
|using ferrites to build a choke (the 1:1 BalUn), make sure to select
|the coax shield at BOTH ends (not the inside lead and coax shield
|pair) to measure.
|
|The object of your measurement is to maximize Z. Using a short coax
|lead going through two small beads, you should find a Z that is
|actually quite close to 50 Ohms - that is, if you have the right
|ferrite formulation. If you do not, it will be some other value
|certainly, and not entirely useless (and possibly better).

Yes, if it's not 50 it will be something else [g]. It is to be hoped
that it will much greater than 50.

|
|As you add beads, the Z will add arithmetically - a simple one for one
|linear increase. This too you can confirm by measurement. If you
|find a large toroid that you can pass the coax through, the Z will add
|by the square of the turns (geometric progression). This too you can
|confirm by measurement.

|
|However, at VHF there is a conflict emerging. You want as many beads
|as possible such that their Z presents 3 to 10 times the load Z.
|However, you want to minimize the length of the coax to no more than a
|twentieth or tenth wavelength long.

I hope by the last you mean the length needs to be minimized while making the measurements and not in the application. I would just as soon have my 200' of Heliax ferrite loaded all the way from the antenna to the shack.

Regards,

Wes

793. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 03:27:09 UTC
From: Chris <spadfly@earthlink.net>
Message-ID: <hYjNc.17620$Qu5.13520@newsread2.news.pas.earthlink.net>
Source record: 92014

Well, I didn't get to do any transmitting tests but on the receive side, the V antenna was much better than the mag mount antenna on the A/C. That antenna is a 4 ft. base-loaded, shunt-fed Antenna Specialists unit. I haven't tried bending it outward yet. Both antennas have less than a 1.5:1 SWR.

Chris
"Chris" <spadfly@earthlink.net> wrote in message
news:x4bNc.15958$mL5.10681@newsread1.news.pas.earthlink.net...
| I live in an appartment and the only kind of antenna I can have is one
that
| is indoors. I have space for a wire antenna on a wall upstairs. I can't
get
| in the attic. If I make a wire inverted V, the ends are behind furniture.
| Would it be OK to just make a V antenna, which gets the ends up the
highest?
| Also, I know I'll get some flack for this but it's for 11 meters. I know
| there is too much garbage on there but I have SSB radios and would like to
| be able to talk to family members who are mobile.
|
| Chris
| (future ham)
|
|

794. make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 03:36:58 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <873c3e9l45.fsf@jidanni.org>
Source record: 91945

From the cable TV company's garbage pile, one has access to tons of 75 ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?

795. Re: Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 04:16:01 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10gblpk648arkea@corp.supernews.com>
Source record: 92015

Thanks for all the input. I'll put it up and see what happens. I'll let you all know.

John Passaneau <jxp16@psu.edu> wrote in message news:ce2vhl$10ao$1@f04n12.cac.psu.edu...
>
> "KC1DI" <elbc2@gwi.net> wrote in message
> news:uvydnRKHlKTvDJ7cRVn-tw@gwi.net...
> > Doug Birky wrote:
> > > I would like to hear from anyone who operates with a windom antenna. Are
> > > there any advantages of putting a 4:1 balun at the feedpoint vs feeding
> with
> > > ladder line? I have about a 200' run from the shack to the trees it will
> be
> > > put up in. It will be up about 40'.
> > >
> > > My plan is to concentrate on 10, 20, and 40 meters.
> > >
> > > Any thoughts?
> > >
> > > Thanks,
> > > Doug/KC8YEC
> > >
> > >
> >
> > Hi Doug,
> >
> > I've been using an OFCD 130' fed about 44' from one end 4:1 balun at
> > fed point and it's up as a sloper about 45' at feed point. All I can say
> > is it works ok for me. Most of my activity is 80-30M but occassionally
> > I operate 20 --10m. I find that the thing has an acceptable SWR on most
> > of the bands and the auto tuner takes care of the tuning quite easily.
> > Is it as good as a dipole I think so and it produces contacts.. There is
> > no magic here though.. it is not better than a dipole most of the time
> > either. but It allows me to have one antenna for all bands that tunes
> > well with the auto tuner. If I had a balance tuner I'd go all the way
> > with the Ladder Line.
> > On my set up I use a choke balun on the coax before it enters the shack.
> >
> > 73, Dave
>

>
> The problem with OFCD dipoles feed with open wire line is that it's
> un-balanced and the line radiates. That is the main difference between a
> Carolina Windom and an OFCD. With a good current 4:1 balun the feed line
> will not radiate. I designed the OFCD dipoles we used at field day and
went
> for the coax feed just to eliminate the feedline radiation. Simulation of
> the antenna shows that it performs as well as a dipole on 80m, on 40m it
has
> the same performance as a 80m dipole feed with open wire line and a tuner
> with less losses as the match to the coax is quite good. Remember tuners
> lose about 10 to 15% of the power passing through them. On 30 meter it was
> not very useable. 20m was good with gain over a dipole but the max gain
was
> in 4 lobes at about 45 deg. to the line of the wire. 17m has a good match
> with the pattern having many more lobes as expected. It had not a good
match
> at all on 15m and 10m was useable. Any multi-band antenna is a compromise
> and for our use at field day it fit the bill quite well. The antenna was
> 135' long with the feed point at 86' from one end through a 4:1 current
> balun. I would recommend using RG-123 or better coax to minimize the
> increase losses from the higher SWR on some bands. By the way I think that
> one of the reasons they worked well is that we had them up as flat tops
not
> as inverted "V". That made the effective height 40' instead of something
> lower if they have be up as inverted "V", it does make a difference.
>
>
> --
> John Passaneau, W3JXP
> Penn State University
> w3jxp@arrl.net
>
>

796. Wire antenna question...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 05:33:04 UTC
From: Dave <Devarim@hotmail.com>
Message-ID: <07d76cdbe4cd9bd72438dabe1c3456f8@news.meganetnews.com>
Source record: 92017

I'm moving to a new house - it's big, on a big lot. But there are no options for a 'proper' antenna that my wife and the neighbors would agree to. So what I want to do is run a wire from the top of the house connected to a pole 10 feet above the roof to a fence at the far end of the yard. Quite hard to see, and long. Easily well over 100 feet - perhaps
more (haven't closed on the home yet, so haven't measured). The high end will be about 35 feet up, sloping down to the fence
to a pole on the fence which will put the end at about 10 feet.

Question: Is there some 'magic' length that will be the easiest to tune with my Kenwood 180-series manual tuner? I would like to work 160 thru 10, but will live with less. Are some lengths of 'random wire' antennas better than others?

Question: the 'feeder' will of course also simply be wire. I plan to run it down the side of the house in 'TV' twinlead insulators screwed into the siding, and then through a 'TV feedthrough' tube into the garage (in my whole life, my ham shack has NEVER been relegated to the GARAGE!!!) Will this be ok? I don't use an amplifier - 100 watts max - the wire would pop through the garage wall and right into the tuner...

Thanks for any input,

Dave WB7AWK

797. Re: 2M homemade colinear designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 05:44:14 UTC
From: ross_anderson@comcast.net
Message-ID: <1cb0099f.0407262144.76038747@posting.google.com>
Source record: 92016

Hi Larry

Here is a simple colinear I designed for 2 meters.

http://home.comcast.net/~ross_anderson/sc.htm

Ross W1HBQ

Larry Gagnon <lagagnon@fakeuniserve.com> wrote in message
news:<pan.2004.06.26.22.56.04.291812@fakeuniserve.com>...
> Am looking for some links to homebrew designs for a base station 2M
> colinear (two stacked 5/8 wave type). I prefer something simple made from
> PVC and wire. Any ideas considered.
>
> Larry VE7EA

798. Re: Log periodic Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 07:10:05 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <hdnNc.26961$qT3.12032@nwrddc03.gnilink.net>
Source record: 92018

"Harold Muller" <mullerhspamguard@sprint.ca> wrote in message
news:GhlNc.548$3f4.4937@newscontent-01.sprint.ca...
>
> While looking for a plan for cheap yet high performance TV antenna I
looked
> at a plan for a log periodic antenna and thought that the circuit for the
> elements could be made from one long piece of wire in zig zag fashion.
> See attached PDF.
>
> I am sure that this is not anything new. Has someone perhaps tried this
> before?
>
> Thanks
> Harold Muller

Harold

Would you consider the Log Periodic Vee antenna design??

I like it because it covers the TV bands so well. The longest elements
radiate as 1/2 wave dipoles at the low end (2 thru 6) and then again as 3/2
wave dipoles at the upper bands (7 thru 13).

As I see it, the "Ving" of the 1/2 wave elements doesnt alter its
radiation pattern excessively. But, when it radiates as a 3/2 wave length
antenna, the lobes from each half of each element are positioned by the V
angle to add in the forward direction.

Jerry

799. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 07:16:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6gvbg050j7t83ap0teue7ke641807gdnmg@4ax.com>
Source record: 92019

On Mon, 26 Jul 2004 19:59:41 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:

>I hope by the last you mean the length needs to be minimized while
>making the measurements and not in the application.

I hope that was obvious by follow-up questions - viz. the short loop
of wire described in the measurements.

Further, if there are a number of beads to add, having them spread
along a full wavelength would not seem as beneficial as within a tight
group. If that tight group were remote from the feedpoint, it would
also suggest that the distance would offer a means to drive the
intervening section into radiation.

If you or Roy have conflicting data to this surmise, now is the time
to reveal it. That is, if there is no need to regard grouping, please
provide context. In other words how much isolation is provided with,
say, 20 beads spread over a quarter wave instead of a twentieth wave.
Further, how much isolation is provided with, say, 20 beads located
half a wave away from the fed end in contrast to within a twentieth
wave of the fed end.

73's
Richard Clark, KB7QHC

800. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 07:18:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ea0cg051ii39l3lmtbvu51epti2b0sfd6e@4ax.com>
Source record: 92020

On Tue, 27 Jul 2004 01:49:29 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> I did try compiling some data for you, doing it "your way" and, in the
>process, thought my measuring system was faulty.

Let's see the data and let it reveal any flaws.

>So, I added an RF
>amplifier to the probe outlet. The additional gain in the system seems to
>make the home made balun look real good.

Hi Jerry,

Don't be coy now. Seeming and reality are miles apart.

73's
Richard Clark, KB7QHC

801. Re: Interesting mobile antenna "discovery"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 07:23:37 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0407262323.1313a8dd@posting.google.com>
Source record: 91921

jder8745@aol.com (JDer8745) wrote in message
news:<20040726194220.04675.00000390@mb-m21.aol.com>...
> Howdy,
>
> While operating "mobile" in a campground I attached a Hustler mast to the frame
> of my trailer and used the 20-m resonator to operate on 20. I also ran a
> random length of wire about 20 feet up a 33-ft MFJ fiberglass telescoping pole
> then horizontal to a convenient tree to use on for 3.91 MHz nets. This formed
> an inverted-L. The wire was connected to the upper end of the Hustler mast and
> the resonator was removed.
>
> I tuned the wire for 75 m with an MFJ tuner. Then I wondered what wud happen
> if I connected the wire to the upper end of the 20-m resonator while it was in
> place..
>
> I tried it and the combination was resonant very near 3.9 MHz. (Happy
> accident!)
>
> The internal AT in the rig wasn't needed, nor was the external one. Two days
> of rain in the campground prevented me from trying various combinations of
> resonator and wire length.
>
> Anyway, I think it’s interesting.
>
> Jack, K9CUN

Got lucky first try...:) I use that method to tune 160m on mine
sometimes. "using an 80m coil" One nice part is the antenna will
usually be more efficient than a normal length mobile whip. Less coil
used with the extra capacitive loading. Had a friend of mine that was
down near Corpus Christi on a vacation, and was working him mobile on
40m. The band fell out, and we needed to go to 80m, but he didn't have
the antenna. I just told him to tack a wire onto what he had and go
with it. Which he did in the motel parking lot. I think he ran the
wire to a small tree. Worked great. The only thing to avoid is having
the wire real near the car body for any large distance. Bad news...
But take it away from the car towards another support like a tree or
mast, and it works fine. MK

802. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 07:42:14 UTC
From: cadence_user@yahoo.fr
Message-ID: <9c0671e1.0407262342.57414c53@posting.google.com>
Source record: 91922

Hi, Richard !

Well, I'm sorry if I made a mistake but I've found in a thesis,
circuits that are for active baluns, using FET:
http://www.unilim.fr/theses/2003/sciences/2003limo0028/images/image251.gif
a) Long-tail pair b) Common Source-Common Gate c) Three transistors
It is true that their use introduce many problems, such as complexity
in stability and linearity. Moreover, an active balun is unilateral.

Well, my problem is to simulate with a software like Cadence some
circuits and to compare results obtained with another software called
ADS: ADS stands baluns, but Cadence don't. And I'm trying to find an
easy balun circuit, well designed, that would make both results
converging...

I hope It's a bit more clear :)
Thanks in advance

Steph

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<skiag09ehvu2tf597urm4vjf510pepqikt@4ax.com>...
> On 26 Jul 2004 05:02:52 -0700, cadence_user@yahoo.fr (Stephane
> Mazurie) wrote:
>
> >I'm trying to find schemes or plans to design an active balun,
>
> Hi Steph,
>
> BalUns are passive devices. Any addition of active circuitry will
> likely limit their utility rather than enhance them. Perhaps if you
> were to describe the purpose or application you seek to accomplish,
> then it would aid us.
>
> 73's
> Richard Clark, KB7QHC

803. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 08:33:40 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <EroNc.5732$Qm2.1079@nwrddc04.gnilink.net>
Source record: 91923

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ea0cg051ii39l3lmtbvu51epti2b0sfd6e@4ax.com...
> On Tue, 27 Jul 2004 01:49:29 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> > I did try compiling some data for you, doing it "your way" and, in the
> >process, thought my measuring system was faulty.
>
> Let's see the data and let it reveal any flaws.
>
> >So, I added an RF
> >amplifier to the probe outlet. The additional gain in the system seems
to
> >make the home made balun look real good.
>
> Hi Jerry,
>
> Don't be coy now. Seeming and reality are miles apart.
>
> 73's
> Richard Clark, KB7QHC

Richard

Where do I start yet be brief?? What can I offer as data?

At 137.50 MHz, I can measure nulls as low as 260 to 1 with a short on the end of the Slotted Line.

The two directional couplers I'm using indicate that the return voltage from the Slotted Line when loaded with a coaxial 50 ohm BNC load is 0.05 volts when the forward voltage is 1.00 volt.

I made an attempt to make a balun by winding 4 turns of RG223 coax thru a pair of ferrite toroid cores. I connected the outer conductor at each end of the coil to the Slotted Line and measured a VSWR of 40 with the null shifting 1/4 wave from the null location with a short. That implies that the "balun" has a very high impedance to a 137.50 MHz signal. I put that balun on the dipole array in the back yard and will try it tomorrow. So, I cant re-measure it right now. I did take pictures of the coil and toroid.

I made a second "?balun?" trying to use a bigger toroid so only one toroid with more turns might be considered. The VSWR with that (bigger) toroid was slightly less than 5:1 and the null moved only 0.24 lambda (toward the input end of the Line). So this bigger toroid ?balun? provides an impedance of around 225-j50 to the signals on the outside of the coax.

Next, I'll try to evaluate a balun made with sub miniature coax wound around a small ferrite toroid.

Jerry

804. asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 09:43:07 UTC
From: paul_welch@webtv.net
Message-ID: <6201-410623AB-511@storefull-3337.bay.webtv.net>
Source record: 91924

best moble antenna for a yaesu 707 ham rig
that wil giv a 1.1 swr at
10 mhz to 30 mhz ..can you help

805. Re: Wire antenna question...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 10:51:14 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <xbydnT91_tA5rpvcRVn-ug@gwi.net>
Source record: 91925

Dave wrote:
> I'm moving to a new house - it's big, on a big lot. But there are no
> options for a 'proper' antenna that my wife and the neighbors would
> agree to. So what I want to do is run a wire from the top of the house
> connected to a pole 10 feet above the roof to a fence at the far end
> of the yard. Quite hard to see, and long. Easily well over 100 feet -
> perhaps
> more (haven't closed on the home yet, so haven't measured). The high
> end will be about 35 feet up, sloping down to the fence
> to a pole on the fence which will put the end at about 10 feet.
>
> Question: Is there some 'magic' length that will be the easiest to tune
> with my Kenwood 180-series manual tuner? I would like to work 160
> thru 10, but will live with less. Are some lengths of 'random wire'
> antennas better than others?
>
> Question: the 'feeder' will of course also simply be wire. I plan to run it
> down the side of the house in 'TV' twinlead insulators screwed into the
> siding, and then through a 'TV feedthrough' tube into the garage (in my
> whole life, my ham shack has NEVER been relegated to the GARAGE!!!)
> Will this be ok? I don't use an amplifier - 100 watts max - the wire would
> pop through the garage wall and right into the tuner...
>
> Thanks for any input,
>
> Dave WB7AWK
>
>
Hi Dave,

I have in the past used several wire antennas such as you discribe. You did not say in your post what your major activity will be DX , Rag Chew , Etc. In any event 100 + feet is good choice.. I've used a 90' foot sloping wire here many times with good results. you will need a good R.F. ground /radial system. doubt at 100 feet that your tuner is going to let it work for you on 160m but then i'm not familar with at tuner.

If I were going to do it again the way you say I would invest in a SGC smarttuner and feed coax to the tuner outside the shack.

Now as to the radiation pattern-- unfortunately a sloping wire such as you discribe will tend to give you high angle radiation patern on the hight freq. (Actually lower Freq. /but that's another whole story) say above 30m the major lobe will tend to be higher than optimal for good dx but it should still produce qsos. You might want to check out Cebiks

excellant work on Inverted L's that will give you some Ideas of what to expect. Although each sight is different.

http://www.cebik.com/ltv.html

73 & G.L. Dave

806. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 13:13:53 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <lysNc.15115$PK5.1284@nwrddc02.gnilink.net>
Source record: 91926

"Stephane Mazurie" <cadence_user@yahoo.fr> wrote in message
news:9c0671e1.0407262342.57414c53@posting.google.com...
> Hi, Richard !
>
> Well, I'm sorry if I made a mistake but I've found in a thesis,
> circuits that are for active baluns, using FET:
> http://www.unilim.fr/theses/2003/sciences/2003limo0028/images/image251.gif
> a) Long-tail pair b) Common Source-Common Gate c) Three transistors
> It is true that their use introduce many problems, such as complexity
> in stability and linearity. Moreover, an active balun is unilateral.
>
> Well, my problem is to simulate with a software like Cadence some
> circuits and to compare results obtained with another software called
> ADS: ADS stands baluns, but Cadence don't. And I'm trying to find an
> easy balun circuit, well designed, that would make both results
> converging...
>
> I hope It's a bit more clear :)
> Thanks in advance
>
> Steph
> > Hi Steph,
> >
> > BalUns are passive devices. Any addition of active circuitry will
> > likely limit their utility rather than enhance them. Perhaps if you
> > were to describe the purpose or application you seek to accomplish,
> > then it would aid us.
> >
> > 73's
> > Richard Clark, KB7QHC

Hi Steph,
Baluns are NOT always passive devices- it is quite common to find active
baluns in both the space and consumer industry. Winegard antennas used to
produce a very low noise MATV preamplifier whose input was an active balun-
thus dispensing with the loss associated with a passive balun.
I encourage your interest and research.

Dale W4OP

807. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 13:52:01 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <9PmdnVI9bblrwJvcRVn-oQ@comcast.com>
Source record: 91927

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:lysNc.15115$PK5.1284@nwrddc02.gnilink.net...
>
> "Stephane Mazurie" <cadence_user@yahoo.fr> wrote in message
> news:9c0671e1.0407262342.57414c53@posting.google.com...
> > Hi, Richard !
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> > Well, I'm sorry if I made a mistake but I've found in a thesis,
> > circuits that are for active baluns, using FET:
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http://www.unilim.fr/theses/2003/sciences/2003limo0028/images/image251.gif
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> > converging...
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> > > Richard Clark, KB7QHC
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> Hi Steph,
> Baluns are NOT always passive devices- it is quite common to find active
> baluns in both the space and consumer industry. Winegard antennas used to
> produce a very low noise MATV preamplifier whose input was an active
balun-
> thus dispensing with the loss associated with a passive balun.
> I encourage your interest and research.
>
> Dale W4OP

>
Dale,
Are you talking about a preamp with 300 Ohm balanced input and 75 Ohm
unbalanced output?

Tam/WB2TT

808. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 15:02:14 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrncgcrjs.8pp.bit-bucket@walnut.config.com>
Source record: 91928

```
On Tue, 27 Jul 2004 02:43:07 -0700, paul hath writ:
> best moble antenna for a yaesu 707 ham rig
> that wil giv a 1.1 swr at
> 10 mhz to 30 mhz ..can you help

Why?
I can't see that the FCC (in its wisdom) has issued a
license for a "Paul Welch" to transmit below 30 mcs.
```

809. Re: Wire antenna question...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 15:16:16 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410671c1@news.vo.lu>
Source record: 91929

"Dave" <Devarim@hotmail.com> wrote in message
news:07d76cdbe4cd9bd72438dabe1c3456f8@news.meganetnews.com...
> I'm moving to a new house - it's big, on a big lot. But there are no
> options for a 'proper' antenna that my wife and the neighbors would
> agree to. So what I want to do is run a wire from the top of the house
> connected to a pole 10 feet above the roof to a fence at the far end
> of the yard. Quite hard to see, and long. Easily well over 100 feet -
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> more (haven't closed on the home yet, so haven't measured). The high
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> to a pole on the fence which will put the end at about 10 feet.
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> Question: Is there some 'magic' length that will be the easiest to tune
> with my Kenwood 180-series manual tuner? I would like to work 160
> thru 10, but will live with less. Are some lengths of 'random wire'
> antennas better than others?
>

Hi Dave,

The longest is the wire the easier you will tune it to a low SWR and could radiate enough power into space.
I worked longtimes with simple longwire 20 and 40 m long (60-120') placed outdoors at 4-5m (~12 ft) high only, with a 31m (102') G5RV placed at the same height (a bad day for the ladder line that touched the grass or rather a small bush 30 cm high, Hi) and with sloper 20m long fixed on the house concrete wall.
Those antennas allowed me to work perfectly locally (bordering countries and all through Europe, this in a radius over 2200 km) as well as DX stations from ON to K, PY, 9K, 4S, UA9, HS but not up to 10000 km away. HS is close to but I never did many such DX with these wires placed so low over the ground. Why ? Due to their poor radiation pattern biaised by the ground influence.

My only error was to use the sloper without balancing the impedance and I never get a low SWR to the antenna and thus I transmitted with as low as 10 W over my 100 W PEP !

About my longwires (flat-top or almost) they where simply tight over the garden and connected to the transceiver without balun and open-wire/coax like there were on the dipole. So I radiated a lot up to into the shack (with 100 W PEP, I reached to output 60 W anyway), the wire arriving by the window (at 2m high over ground) and having only 50cm to 1m to run indoors to reach the RTX).

Of course any tuner will help you to get a low SWR and to balance the impedance to 50 ohms.
On 160 and 80 m this is another affair, and mainly for the lowest band. But try, this is the objective in being amateur radio too...

But if you haven't buy it yet, first of all install an external SWR-meter to know exactly what amount of power reach your antenna as your internal RTX meter gives you only its own SWR, not the one going to the antenna... There is a world apart : you can get SWR 1:1 at the TX output but SWR infinite at the antenna input too !. That mean that reading SWR 1:1 on the RTX you beleive that you transmit at 100 W PEP but all this power is lost as heat ; you will shout and shout at the mike without working the least station because your SWR at the antenna is sky high... too pity, and better to know it before speaking at the mike ;-)

To begin, you will find more info about wire antennas here :
http://www.astrosurf.com/lombry/antenna.htm
http://www.astrosurf.com/lombry/qsl-longwire.htm

About SWR:
http://www.astrosurf.com/lombry/qsl-swr.htm
http://www.astrosurf.com/lombry/qsl-transmission-line2.htm

> Question: the 'feeder' will of course also simply be wire. I plan to run it

Not sure at all that the feeder made of your simple wire will not pickup RFI from any conducteur longer than 1/4-lamda place in your garage or anywhere else. In using an open-wire (to maintain outdoor and without touching the ground) or a coax (a bit more lossy) you will prevent this problem and can balance your impedance to adapt to the one of the RTX.

My advice : buy some tens of meters of ladder line and RG58/U coax and made some tests. You will learn a lot of things.

Buy or read also the last edition of the ARRL Antenna Book (now it comes with a CD where files are saved in PDF) or any other about wire antennas published by ARRL or RSGB. There are a lot of readings on these matters too.

Hope this helps.

73
Thierry, ON4SKY

> down the side of the house in 'TV' twinlead insulators screwed into the
> siding, and then through a 'TV feedthrough' tube into the garage (in my
> whole life, my ham shack has NEVER been relegated to the GARAGE!!!)
> Will this be ok? I don't use an amplifier - 100 watts max - the wire would
> pop through the garage wall and right into the tuner...
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> Thanks for any input,
>
> Dave WB7AWK

>
>

810. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 15:23:12 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <AruNc.5885$Qm2.4863@nwrddc04.gnilink.net>
Source record: 91930

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:9PmdnVI9bblrwJvcRVn-oQ@comcast.com...
>
> "Dale Parfitt" <par@parelectronics.com> wrote in message
> news:lysNc.15115$PK5.1284@nwrddc02.gnilink.net...
> >
> > "Stephane Mazurie" <cadence_user@yahoo.fr> wrote in message
> > news:9c0671e1.0407262342.57414c53@posting.google.com...
> > > Hi, Richard !
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> > > Well, I'm sorry if I made a mistake but I've found in a thesis,
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> http://www.unilim.fr/theses/2003/sciences/2003limo0028/images/image251.gif
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> > > > then it would aid us.
> > > >
> > > > 73's
> > > > Richard Clark, KB7QHC
> >
> > Hi Steph,
> > Baluns are NOT always passive devices- it is quite common to find active
> > baluns in both the space and consumer industry. Winegard antennas used
to
> > produce a very low noise MATV preamplifier whose input was an active
> balun-

> > thus dispensing with the loss associated with a passive balun.
> > I encourage your interest and research.
> >
> > Dale W4OP
> >
> Dale,
> Are you talking about a preamp with 300 Ohm balanced input and 75 Ohm
> unbalanced output?
>
> Tam/WB2TT
>
> Yes

W4OP

811. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 15:41:41 UTC
From: John Shadle <shadle@email.unc.edu>
Message-ID: <Pine.A41.4.44+UNC.0407271140120.50756-100000@login0.isis.unc.edu>
Source record: 91931

On 27 Jul 2004, drwxr-xr-x wrote:

> On Tue, 27 Jul 2004 02:43:07 -0700, paul hath writ:
> > best moble antenna for a yaesu 707 ham rig
> > that wil giv a 1.1 swr at
> > 10 mhz to 30 mhz ..can you help
>
> Why?
> I can't see that the FCC (in its wisdom) has issued a
> license for a "Paul Welch" to transmit below 30 mcs.

really? i found the following people with the name Paul Welch who are
licensed to operate as amateur radio operators:

N0OCH
N5MMG

am i missing something...?

812. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 15:43:39 UTC
From: John Shadle <shadle@email.unc.edu>
Message-ID: <Pine.A41.4.44+UNC.0407271142430.50756-100000@login0.isis.unc.edu>
Source record: 91932

On Tue, 27 Jul 2004, John Shadle wrote:

> On 27 Jul 2004, drwxr-xr-x wrote:
>
> > On Tue, 27 Jul 2004 02:43:07 -0700, paul hath writ:
> > > best moble antenna for a yaesu 707 ham rig
> > > that wil giv a 1.1 swr at
> > > 10 mhz to 30 mhz ..can you help
> >
> > Why?
> > I can't see that the FCC (in its wisdom) has issued a
> > license for a "Paul Welch" to transmit below 30 mcs.
>
> really? i found the following people with the name Paul Welch who are
> licensed to operate as amateur radio operators:
>
> N0OCH
> N5MMG
>
> am i missing something...?

ah. that's why they always say "think before you post". i'm guessing the original author probably meant meters instead of megahertz...right, Paul? ;)

my bad.

813. feed line and coax : longwire vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 15:46:11 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410678c4$1@news.vo.lu>
Source record: 91933

Hi,

I want to tight a straight 100m (300 ft) or 2x50m (in horizontal V) longwire over my garden probably at a height close to 10m, not more.
I like this design because in using very long wire (3-5 lambda or more), its radiation patterns (Az, El.) show more lobes with a low takeoff angles than a dipole.
My question deals with the matching section.
Do you confirm that the next design 'd work fine (this is for DXing) but the problem is purely technical ?

From the centre part of the longwire (at about 50m that will be cut) I'd like to use a lambda/4 feed line or so (a open-wire of 600 ohms close to 10 m long)
It will run vertically down to the ground.
I will not use a balun 6 or 4:1 after the open-wire.
From this point 10m away, I use a RG58 or 213 coax to the RTX.

But here is my question, does it means that one segment of my longwire must be soldered to the braid of my coax, the other one at centre of the coax ?
Does this design transform my longwire in dipole ? I believe...

Or is there another way to link the ladder line to the coax (or using no coax at all to the RTX, I don't think so), without transforming this design in dipole and keep what I 'd call the "longwire properties" ?

Thanks in advance

73
Thierry, ON4SKY
http://www.astrosurf.com/lombry

814. Re: Wire antenna question...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 16:01:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ce5u8t$c0q$1@sparta.btinternet.com>
Source record: 91934

"Dave" wrote
> So what I want to do is run a wire from the top of the house
> connected to a pole 10 feet above the roof to a fence at the far end
> of the yard. Quite hard to see, and long. Easily well over 100 feet -
> perhaps
==========

You will have an inverted-L antenna. With the down-lead overall length will be of the order of 130 feet, or a nice 1/4-wave on 160m.

Actually, on 160m, a nicer length is roughly 150 feet. This is because 150 feet is very easy to tune up. Perhaps you could make an inverted-U out of it. It may need only a 500 pf, relatively low voltage tuning capacitor in series with the near end of the wire. The longer the wire the smaller the capacitor setting.

The antenna will work quite well on all HF bands with a tuner. But performance will fall off relative to a 1/2-wave dipole cut for a particular higher frequency band such as 10 or 20m. For practical purposes, taking one band with another, it can be considered omni-directional. Use thin 18 or 16 gauge, unobtrusive enamelled copper magnet wire.

You will need only a modest ground system such as a few (6 or more) shallow buried radial wires extending in various directions, of various lengths, from one wall of the house into garden soil. On 160m, radial wires only 20 or 25 feet long will be quite effective. In dry stoney soil more ground wires may be useful but not necessarily any longer.

Also make use of the domestic hot or cold plumbing system. The transmitter will pick up yet another ground via its power line connection. But don't even think about a ground rod - it will be useless - hardly better than one radial of the same length.

Reg, G4FGQ

815. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 16:50:31 UTC
From: paul_welch@webtv.net
Message-ID: <4166-410687D7-526@storefull-3335.bay.webtv.net>
Source record: 91935

below 30 mhz is cb radio... evry one is free to talk thar!!!..in the state of cali anny way ...if you can not help me then no not ancer my post...

816. Water in traps on a 4BTV vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 17:27:39 UTC
From: nospam <nospam@nospam.com>
Message-ID: <XfwNc.22293$QO.2105@bignews5.bellsouth.net>
Source record: 91936

Has anyone had a problem with water accumulating in the traps on a vertical antenna? Seems like my Hustler 4BTV has SWR problems after heavy rain ..... then clears up after a few dry days.

817. Re: Water in traps on a 4BTV vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 17:51:02 UTC
From: Vito <vito@crosslink.net>
Message-ID: <41069607$0$11086@dingus.crosslink.net>
Source record: 91937

Dunno about 4BVT but my child bride retuned her Butternut after a heavy rain, made several quick contacts then cranked on her amp to reach a friend and promptly blew her finals. The SWR had shot up! I attributed it to water in the caps being boiled off by "them killer watts" but who knows. I "KISSed" the problem away by selling the 'nut and putting up a set of wire dipoles that work even better than the 'nut did.

"nospam" <nospam@nospam.com> wrote in message news:XfwNc.22293$QO.2105@bignews5.bellsouth.net...
> Has anyone had a problem with water accumulating in the traps on a vertical
> antenna? Seems like my Hustler 4BTV has SWR problems after heavy rain
> .... then clears up after a few dry days.
>
>
>

818. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 18:32:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rl7dg0pgu75ie4533k9oeu7dcbrs413e17@4ax.com>
Source record: 91938

On Tue, 27 Jul 2004 03:27:09 GMT, "Chris" <spadfly@earthlink.net>
wrote:

>That
>antenna is a 4 ft. base-loaded, shunt-fed Antenna Specialists unit.

Hi Chris,

I was thinking more of the full size CB whips.

> I haven't tried bending it outward yet.

There is no particular virtue in that unless you are running parallel
to metal structures along the building, however:

>Both antennas have less than a 1.5:1

suggests there are no immediate, obvious problems.

73's
Richard Clark, KB7QHC

819. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 18:53:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <438dg0d5rmvg8be84c4j5fu5u4pch4cafu@4ax.com>
Source record: 91939

On Tue, 27 Jul 2004 08:33:40 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> Where do I start yet be brief?? What can I offer as data?

> At 137.50 MHz, I can measure nulls as low as 260 to 1 with a short on the
>end of the Slotted Line.

This is data! It tells me that your system is capable of measuring
over a considerable range of SWR.

What do you measure with an open?

> The two directional couplers I'm using indicate that the return voltage
>from the Slotted Line when loaded with a coaxial 50 ohm BNC load is 0.05
>volts when the forward voltage is 1.00 volt.

What does the slotted line ITSELF measure?

Low SWRs may be more difficult to measure because of your limited
resolution (as distinct from considerable range shown above). Here,
it makes sense to measure NOT the DC voltage of a detector, but a 1KHz
modulation using a specialized VTVM designed for this purpose. It
includes 1KHz tuning to keep out noise, and a stepped attenuator to
allow for exaggerated and sensitive scaling. The wide meter scales
are perfect for low SWR, and the stepped attenuator takes care of
extreme ranges of high SWR.

> I made an attempt to make a balun by winding 4 turns of RG223 coax thru a
>pair of ferrite toroid cores. I connected the outer conductor at each end
>of the coil to the Slotted Line and measured a VSWR of 40 with the null
>shifting 1/4 wave from the null location with a short. That implies that
>the "balun" has a very high impedance to a 137.50 MHz signal.

THIS is data!

> I made a second "?balun?" trying to use a bigger toroid so only one toroid
>with more turns might be considered. The VSWR with that (bigger) toroid
>was slightly less than 5:1 and the null moved only 0.24 lambda (toward the
>input end of the Line). So this bigger toroid ?balun? provides an impedance
>of around 225-j50 to the signals on the outside of the coax.

THIS is data!

Hi Jerry,

The first BalUn with a SWR of 40 tells you that you have a superlative
example of material for your application.

The second BalUn with a SWR of more turns with a SWR of 5 is simply pitiful in comparison. It is useful as a minimum value and suggests the material in this ferrite is mediocre for VHF (but may well shine in the HF).

73's
Richard Clark, KB7QHC

820. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 19:00:10 UTC
From: W4UDX <w4udx@bellsouth.net>
Message-ID: <3DxNc.22716$QO.21230@bignews5.bellsouth.net>
Source record: 91940

I don't think such an antenna exists. Mobile HF antennas are physically shortened, with loading coils or resonators, and by nature have a narrow bandwidth. To cover the frequencies you mentioned, some tuning is going to be required for greater bandwidth.... either an antenna tuner at the rig, near the antenna, or built-in to the antenna (such as the "screwdriver" types). You could use the economical Hustler mobile antenna system with the multi resonator adapter, which allows for up to 4 bands to be use (I think), but even then, each resonator is going to have only a certain bandwidth, and to go from the CW portion of the band to the SSB portion may require adjusting the tip on the end of the resonator. Not to mention the whole thing would be seriously gawdy looking. Icom and Yeasu both make remote tunable mobile antennas, but like the screw-driver types, they can be pricey. I would home brew an "Outbacker" type of antenna and just change the fly lead connection when you want to change bands.... There are websites that show how to build them using various materials.

73
Mark W4UDX

"paul" <paul_welch@webtv.net> wrote in message
news:6201-410623AB-511@storefull-3337.bay.webtv.net...
> best moble antenna for a yaesu 707 ham rig
> that wil giv a 1.1 swr at
> 10 mhz to 30 mhz ..can you help
>

821. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 19:20:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ba9dg01pe2mnkjof85bqolahacm828liu9@4ax.com>
Source record: 91941

On 27 Jul 2004 00:42:14 -0700, cadence_user@yahoo.fr (Stephane
Mazurie) wrote:

>Well, I'm sorry if I made a mistake but I've found in a thesis,
>circuits that are for active baluns, using FET:
>http://www.unilim.fr/theses/2003/sciences/2003limo0028/images/image251.gif
>a) Long-tail pair b) Common Source-Common Gate c) Three transistors
>It is true that their use introduce many problems, such as complexity
>in stability and linearity. Moreover, an active balun is unilateral.
>
>Well, my problem is to simulate with a software like Cadence some
>circuits and to compare results obtained with another software called
>ADS: ADS stands baluns, but Cadence don't. And I'm trying to find an
>easy balun circuit, well designed, that would make both results
>converging...

Hi Steph,

Well, what you show above are inverters and buffers. They can
isolate, and they can invert, and I suppose they can act as
substitutes for a BalUn, but simulation software should have some
capacity to offer "perfect" transformers that would do just as well.
Or such has been my experience.

However, this says nothing of the APPLICATION which may suffer
comparisons where you lose significant characteristics - unilateral
response being very significant, or insignificant depends entirely on
APPLICATION.

You originally asked for "schemes or plans to design an active balun"
and you offer exactly this in your link above. What is it you need?
Part numbers? What frequency are you doing this at? What drive
levels are going in? What output levels are expected? How much phase
distortion is allowed?

When I look at Cadence's own RF Library, it quite clearly shows
BalUns:
http://www.cadence.com/whitepapers/rf_behavioral.pdf
so it would appear your's is a problem of RTMFM.

73's
Richard Clark, KB7QHC

822. Does external antenna negate the built in

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 19:32:04 UTC
From: James <jrapier@dcr.net>
Message-ID: <W4yNc.40$79.39@fe39.usenetserver.com>
Source record: 91942

I recently bought a Tecsun BCL 2000, clone of a Grundig S350. I noticed that using an external antenna on medium wave seems to leave the built in one still active. Rotating the radio itself seems to change the signal strength.

The radio is manual tuning only with no presets but seems to be a very good box. As you might tell, I am a novice at this and didn't plunge into big bucks on a radio before checking my interests. I did put up a long wire antenna (about 70 feet) and jammed a very thick copper wire into the ground like a wicket about 18 inches for the ground.

The radio works well but I was under the impression that the built in would not be active on medium wave when external is used. Apparently I'm wrong as the external input is just a wire lock arrangement and not a jacked input. This brings up another question. I have a radio shack longwire antenna in a wind up case for use indoors where the outside antenna is not practical. It's 23 feet long and used for extending the whip for FM and shortwave. So is the whip active as well as the built in for medium wave?

Any insight on the arrangement of these things would be appreciated.

823. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 20:05:53 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <BAyNc.12926$Nu4.9488@nwrddc01.gnilink.net>
Source record: 91943

Richard

The VSWR with the line open is about 19:1. It doesnt matter if the line has either N or BNC at its output end, opened.

As you know, I dont have a lab where I have access to any standards. I'm using old "swap meet" test equipment and some parts I pulled out of a dumpster. I only waned to build something that would tell me aproximately what the impedance of an unknown load is at 137 Mhz. I think this piece of plumbing pipe does exactly what I wanted.

At 137.50 MHz, I measure an incident voltage of 0.3 volts and a reflected voltage of 0.02 volts into the Slotted Line with a 50 ohm load on its output end. I dont see any variation in reflected voltage when I move the probe or even remove it. The needle does wiggle a few degrees when the probe is moved but that isnt measurable. I dont even know how good this Slotted Line needs to be. I just thought I'd build one since I'm too dumb to understand any other way to measure impedance without buying something designed for the application. Buying things takes most of the fun out of a project.

I could easily have major inaccuracies in this Line and just dont know it yet. But, so far, this Home Depot pipe seems to be able to tell me alot about impedance of unknown loads.

You introduce the possibility of measuring impedances with low VSWR. That has become kinda interesting to me since I've been reading about what people are doing with lengths of coax. Atthough I have no need for determining load impedances with VSWR less than 1.5:1, it might be fun to try to build something. So far, I cant understand how to measure load impedance accurately when the VSWR is under 1.5:1

Jerry

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:438dg0d5rmvg8be84c4j5fu5u4pch4cafu@4ax.com...
> On Tue, 27 Jul 2004 08:33:40 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> > Where do I start yet be brief?? What can I offer as data?
>
> > At 137.50 MHz, I can measure nulls as low as 260 to 1 with a short on
the
> >end of the Slotted Line.
>
> This is data! It tells me that your system is capable of measuring

> over a considerable range of SWR.
>
> What do you measure with an open?
>
> > The two directional couplers I'm using indicate that the return voltage
> >from the Slotted Line when loaded with a coaxial 50 ohm BNC load is 0.05
> >volts when the forward voltage is 1.00 volt.
>
> What does the slotted line ITSELF measure?
>
> Low SWRs may be more difficult to measure because of your limited
> resolution (as distinct from considerable range shown above). Here,
> it makes sense to measure NOT the DC voltage of a detector, but a 1KHz
> modulation using a specialized VTVM designed for this purpose. It
> includes 1KHz tuning to keep out noise, and a stepped attenuator to
> allow for exaggerated and sensitive scaling. The wide meter scales
> are perfect for low SWR, and the stepped attenuator takes care of
> extreme ranges of high SWR.
>
> > I made an attempt to make a balun by winding 4 turns of RG223 coax
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> >pair of ferrite toroid cores. I connected the outer conductor at each
end
> >of the coil to the Slotted Line and measured a VSWR of 40 with the null
> >shifting 1/4 wave from the null location with a short. That implies that
> >the "balun" has a very high impedance to a 137.50 MHz signal.
>
> THIS is data!
>
> > I made a second "?balun?" trying to use a bigger toroid so only one
toroid
> >with more turns might be considered. The VSWR with that (bigger) toroid
> >was slightly less than 5:1 and the null moved only 0.24 lambda (toward
the
> >input end of the Line). So this bigger toroid ?balun? provides an
impedance
> >of around 225-j50 to the signals on the outside of the coax.
>
> THIS is data!
>
> Hi Jerry,
>
> The first BalUn with a SWR of 40 tells you that you have a superlative
> example of material for your application.
>
> The second BalUn with a SWR of more turns with a SWR of 5 is simply
> pitiful in comparison. It is useful as a minimum value and suggests
> the material in this ferrite is mediocre for VHF (but may well shine
> in the HF).
>

> 73's
> Richard Clark, KB7QHC

824. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 20:44:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fcedg0h2ug0cgefvo3r6o9ccl3447n48pp@4ax.com>
Source record: 91944

On Tue, 27 Jul 2004 20:05:53 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> The VSWR with the line open is about 19:1. It doesnt matter if the line
>has either N or BNC at its output end, opened.

Hi Jerry,

Opens are generally a little more difficult to nail down.

However, as to measuring very high SWRs, you probably have a fair
amount of error hidden in these determinations. When measuring high
SWRs the problem of measuring the minima often leads to inserting the
probe too deep into the trough to find the null. This deep insertion
will disturb the real SWR and give you an apparent SWR. There are
methods to recover the accuracy, but it is hardly an issue for your
purposes, so I will not pursue that here.

>I think this piece of
>plumbing pipe does exactly what I wanted.

I would agree.

> At 137.50 MHz, I measure an incident voltage of 0.3 volts and a
>reflected voltage of 0.02 volts into the Slotted Line with a 50 ohm load on
>its output end. I dont see any variation in reflected voltage when I move
>the probe or even remove it.

This is not what I meant by reading the matched SWR with the Line.
USE the line to measure the variation along its length. DO NOT use
the arrangement of directional couplers as you have above.

>The needle does wiggle a few degrees when the
>probe is moved but that isnt measurable.

My guess is that you will see very little variation along the length
of the line. Can you confirm or negate this expectation?

>I dont even know how good this Slotted Line needs to be.

As accurate as you need for your measurement - that is, no or little
residual SWR. Judging by your comments, you have obtained this. What
I keep harping on about is the cold facts of data to remove qualifying
statements. You have provided some of the Cardinal measuring points -
e.g. Open/Short/50 Ohm load.

> I could easily have major inaccuracies in this Line and just dont know it
>yet.

Your doubt is unwarranted.

> You introduce the possibility of measuring impedances with low VSWR. That
>has become kinda interesting to me since I've been reading about what people
>are doing with lengths of coax. Atthough I have no need for determining
>load impedances with VSWR less than 1.5:1, it might be fun to try to build
>something. So far, I cant understand how to measure load impedance
>accurately when the VSWR is under 1.5:1

That is because of the sensitivity problem I have written about. You
have great range measurements, but that is unnaturally forced.

***** This is your next step, if you skip it, you will find ***
***** yourself spinning your wheels with muddled results. ***

Build your own 1.1:1 standard and try to measure it - this should be
telling. It will test your skill more than the line (which appears to
be fine), but so much of measurement at this stage is necessary skill.
If you encounter difficulty it is NOT the line! Your limiting
consideration is found at the detector and being able to resolve very
small differences.

Trying to do this with DC measurements from a detector is going to be
extremely hard. You should instead re-read my comments about AC
detectors and 1KHz meters because they are very useful for doing what
you plan to do. I know you may not have access to this specialized
gear, but invention "used" to be part of the craft of Ham radio
(instead of pushing credit cards across display cases).

You can use a spare receiver (it will have to be an AM VHF rig without
AVC/AGC) in place of the detector. Use an AC meter across the speaker
and go to town, you will have all the sensitivity in the world, and
your meter should solve the resolution problem.

73's
Richard Clark, KB7QHC

825. New Toy

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 21:12:12 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <MyzNc.180424$tH1.7688270@twister.southeast.rr.com>
Source record: 91946

Came by an automatic antenna tunerfor free. Electronics is fried but all the coils caps and relays seem to be OK. Was thinking of seting this up with a 30 ft vertical radiator and control the relays manually with a switch. I have a 20 position rotary switch. Output of theswitch would feed a diode encoder that would select desired relays. Any thoughts on this.

826. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 21:24:13 UTC
From: jgboyles@aol.com
Message-ID: <20040727172413.19157.00002461@mb-m06.aol.com>
Source record: 91947

>From the cable TV company's garbage pile, one has access to tons of 75
>ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?

The Zo of coaxial cable is determined primarily by the ratio of the diameter of the inner conductor to the diameter of the outer conductor (shield). Not much you can do to modify either dimension on a 40m long 75 ohm cable. Depending on the application, 75 ohm cable can be used in a 50 ohm Amateur system without too much of a problem.
If you want to have everything matched, put a matching network at the antenna to match its impedance to 75 ohms. At the other end of your 40m 75 ohm cable, the impedance will be 75 ohms, transform that to 50 ohms with a matching network and you are all set. By the time you go through all that, you may decide it's cheaper and easier to buy 40m of 50 ohm coax.
73 Gary N4AST

827. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 21:58:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ce6j5g$qa5$1@titan.btinternet.com>
Source record: 91949

75 ohm cable is a better match to the centre of a dipole (abount 70-ohms)
than 50-ohm cable. As JGBOYLES sez, it doesn't matter much either way.

To transform 75-ohm cable to 50-ohm requires melting down to basics and
starting again from the raw materials. Or which leg are you pulling?

Reg, G4FGQ

==========

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040727172413.19157.00002461@mb-m06.aol.com...
> >From the cable TV company's garbage pile, one has access to tons of 75
> >ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?
>
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diameter of
> the inner conductor to the diameter of the outer conductor (shield). Not
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> you can do to modify either dimension on a 40m long 75 ohm cable.
Depending on
> the application, 75 ohm cable can be used in a 50 ohm Amateur system
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> If you want to have everything matched, put a matching network at the
antenna
> to match its impedance to 75 ohms. At the other end of your 40m 75 ohm
cable,
> the impedance will be 75 ohms, transform that to 50 ohms with a matching
> network and you are all set. By the time you go through all that, you may
> decide it's cheaper and easier to buy 40m of 50 ohm coax.
> 73 Gary N4AST

828. Re: New Toy

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 21:58:43 UTC
From: jgboyles@aol.com
Message-ID: <20040727175843.19157.00002463@mb-m06.aol.com>
Source record: 91948

> Any thoughts on this.

What you are contemplating will certainly work on 40m-10m, and possibly 80m. The auto tuners I have looked into use an L network, with the inductor and capacitor values in a binary sequence so you can get smooth matching in 256 or 512 increments. Also the L network topology can be changed, depending on the impedance it is trying to match. You will have to configure your rotary switch, diode encoder arrangment to get the maximum versatility. (this may take some time)
You will also need some sort of match indicator. I use an MFJ antenna analyzer since it has its own signal source. You could use low power rig and swr bridge. And, of course the ground system is important in any vertical radiator system.
73 Gary N4AST

829. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 22:17:10 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <GvANc.17021$PK5.17008@nwrddc02.gnilink.net>
Source record: 91950

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:873c3e9l45.fsf@jidanni.org...
> From the cable TV company's garbage pile, one has access to tons of 75
> ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?

You can "EASILY" fill the space inside that *air* dielectric 75 ohm line
with polyethtlene. That will make it close to 50 ohms.
Somethime is is easier to use a coax line 'as is'.

Jerry

830. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 22:27:00 UTC
From: jgboyles@aol.com
Message-ID: <20040727182700.19157.00002466@mb-m06.aol.com>
Source record: 91951

>You can "EASILY" fill the space inside that *air* dielectric 75 ohm line
>with polyethtlene.

Hi Jerry, I don't understand. CATV 75 ohm cable is not air dielectric.
73 Gary N4AST

831. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 22:33:11 UTC
From: jder8745@aol.com
Message-ID: <20040727183311.16492.00000552@mb-m14.aol.com>
Source record: 91952

Just use it if you want to. I have a 242-ft roll of Cable Co. hardline (reel end) and my problem is trying to figger out connectors for it not having to buy them.

Seems like I rember an QST article a few yrs back on various ham solutions to this problem. At that time I think it was Heliax they were talking abt in the article.

73 de Jack, K9CUN

832. Re: Non inverted V antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 22:41:31 UTC
From: Chris <spadfly@earthlink.net>
Message-ID: <vSANc.618$cK.280@newsread2.news.pas.earthlink.net>
Source record: 91953

Oddly enough, the window frame is parallel to the antenna and just a few inches away. Also, the tip of the whip is just under the metal gutter. A 1/4 wave would be against the gutter if not tilted outward. It's worth a try.

Chris
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rl7dg0pgu75ie4533k9oeu7dcbrs413e17@4ax.com...
| On Tue, 27 Jul 2004 03:27:09 GMT, "Chris" <spadfly@earthlink.net>
| wrote:
|
| >That
| >antenna is a 4 ft. base-loaded, shunt-fed Antenna Specialists unit.
|
| Hi Chris,
|
| I was thinking more of the full size CB whips.
|
| > I haven't tried bending it outward yet.
|
| There is no particular virtue in that unless you are running parallel
| to metal structures along the building, however:
|
| >Both antennas have less than a 1.5:1
|
| suggests there are no immediate, obvious problems.
|
| 73's
| Richard Clark, KB7QHC

833. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 22:48:28 UTC
From: jgboyles@aol.com
Message-ID: <20040727184828.19157.00002469@mb-m06.aol.com>
Source record: 91954

>You can "EASILY" fill the space inside that *air* dielectric 75 ohm line
>>with polyethtlene.
>
>Hi Jerry, I don't understand. CATV 75 ohm cable is not air dielectric.
>73 Gary N4AST

Unless you are talking about hardline or heliax, the orginal post was about
CATV 75 ohm junk yard stuff, which is not air dielectric.
73 Gary N4AST

834. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 22:57:35 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <z5BNc.17046$PK5.2819@nwrddc02.gnilink.net>
Source record: 91955

Yeah -- I didnt read the part about what kind of line he had access to.
I guess I'd have to advise that he use the line "as it", which was my
origibal point.

Jerry

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040727182700.19157.00002466@mb-m06.aol.com...
> >You can "EASILY" fill the space inside that *air* dielectric 75 ohm line
> >with polyethtlene.
>
> Hi Jerry, I don't understand. CATV 75 ohm cable is not air dielectric.
> 73 Gary N4AST

835. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:00:23 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <b8BNc.199365$XM6.81501@attbi_s53>
Source record: 91956

What's wrong with a simple 1/2 wavelength, in transmission line,
transmission line balun? If you are @137 MHZ it should be a snap!!

See Antenna Handbook [ARRL 18th edition] pages 18-5 and 18-6.

Jerry Martes wrote:

> I'm trying to build a 1:1 balun with minimun insertion loss for 137 MHz.
> I have never done this before and would like to hear from someone who has
> some experience with building and using a 1:1 balun at VHF.
>
> I've been trying to wind small coax inside ferrite toroids. The only
> thing I can measuer on this balun is its impedance, but actually would like
> to know its effect on the radiation pattern.
>
> At this point in my tests, I can provide 300 ohms of highly reactive
> impedance on the outer conductor of the "RG58" type coax. At the beginning
> of this project I assumed that I could easily get much higher impedances.
>
> Any information and advice will be appreciated.
>
> Jerry
>
>

836. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:09:05 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <lgBNc.199402$XM6.136554@attbi_s53>
Source record: 91957

A differential amplifier will accept balanced inputs and generate an unbalanced output. [BAL-UN]

Similarly a any FET can accept an unbalanced input at the gate and if the loads in the source and drain are the same you will get balanced outputs. [UN-BAL]

Choose your active circuit depending on which conversion you want. Then choose components to meet your needs.

Note: These are low level circuits not intended for significant power.

W1MCE

Stephane Mazurie wrote:

> Hello, All!
>
> I'm trying to find schemes or plans to design an active balun, with
> MOSFETS, integrated, but I can't find a lot of things in this way!
> If you could help me...
>
> Thanks in advance!
> Regards,
>
> Steph

837. What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:13:08 UTC
From: wolfee <clambrain@com.invalid>
Message-ID: <8kBNc.142435$OB3.141274@bgtnsc05-news.ops.worldnet.att.net>
Source record: 91958

I just bought a Terk Advantage antenna. It really does help my cheap little table top radio get stations a lot farther away. Will I still be able to use it when digital AM radio arrives?

838. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:14:34 UTC
From: dplatt@radagast.org
Message-ID: <10gdoeqdulnm070@corp.supernews.com>
Source record: 91959

In article <20040727183311.16492.00000552@mb-m14.aol.com>,
JDer8745 <jder8745@aol.com> wrote:

>Just use it if you want to. I have a 242-ft roll of Cable Co. hardline (reel
>end) and my problem is trying to figger out connectors for it not having to buy
>them.
>
>Seems like I rember an QST article a few yrs back on various ham solutions to
>this problem. At that time I think it was Heliax they were talking abt in the
>article.

http://home.hamlab.com:225/radio/hardline.htm shows one method for
homebrewing a hardline-to-N connector, using a standard N-connector
and a hardware-store 1/2" compression butt fitting. Haven't tried it
myself but it looks workable and not too difficult to do (I almost
wrote "not too difficult to pull off" but that gives precisely the
wrong message :-)

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

839. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:16:28 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <gnBNc.199431$XM6.89785@attbi_s53>
Source record: 91960

Well Paul, below 30 MHz is NOT CB radio. If you operate there and FCC finds you, you will face very stiff fines up to $10,000.

CB radio is confined to 40 specific channels in the 27 to 27.5 MHz frequency range.

Be careful!!

paul wrote:

> below 30 mhz is cb radio... evry one is free to talk thar!!!..in the
> state of cali anny way ...if you can not help me then no not ancer my
> post...
>

840. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:18:10 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <SoBNc.198730$Oq2.171567@attbi_s52>
Source record: 91961

Also, if you can identify yourself as holding a VALID FCC license for 10 to 30 MHz operation you will get many positive responses.

Be Careful

paul wrote:

> below 30 mhz is cb radio... evry one is free to talk thar!!!..in the
> state of cali anny way ...if you can not help me then no not ancer my
> post...
>

841. Re: Water in traps on a 4BTV vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:20:02 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <CqBNc.199450$XM6.108258@attbi_s53>
Source record: 91962

I've run a 4BTV for 2 years and no VSWR issues after weather.

Sounds like you have a leaky trap.

W1MCE

nospam wrote:

> Has anyone had a problem with water accumulating in the traps on a vertical
> antenna? Seems like my Hustler 4BTV has SWR problems after heavy rain
> .... then clears up after a few dry days.
>
>
>

842. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:30:58 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <7jodg0do2kr7emq0hqe9tr2m9aak4cojqg@4ax.com>
Source record: 91963

On Tue, 27 Jul 2004 11:36:58 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

|From the cable TV company's garbage pile, one has access to tons of 75
|ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?

Ideas:

1) Use as is. At h-f this is a viable solution.

2) For single-band use, there are any number of ways to match each
end to 50-ohm. You could stub match at each end, use geometric mean
1/4 wavelength line sections at each end, or series-section
(alternating 50 and 75 ohm sections) at each end.

3) At h-f, you could use wound broadband transformers.

4) Don't use it at all. "Free" isn't necessarily free after you
factor in the expense of doing the matching and fabricating one-off
connectors. A 125' length of decent coax isn't that expensive.

843. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:41:23 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <DKBNc.13156$Nu4.11681@nwrddc01.gnilink.net>
Source record: 91964

Dave
I dont have the Antenna Handbook. But, is that the trifilar wound 1:1 balun?? I have tried several trifilar baluns but always get too much insertion loss. I think a good trifilar-ferrite-1:1 balun would be exactly what I'd like to be able to make.
I suspect the 1/2 wave bakun you refer to is a 4:1 impedance transformer. I want to get a 1:1 balun.
The coax in the ferrite toroid is desireable because it has low insertion loss. I am certainly not an expert on baluns.

Jerry

"Dave Shrader" <david.shrader@comcast.net> wrote in message news:b8BNc.199365$XM6.81501@attbi_s53...
> What's wrong with a simple 1/2 wavelength, in transmission line,
> transmission line balun? If you are @137 MHZ it should be a snap!!
>
> See Antenna Handbook [ARRL 18th edition] pages 18-5 and 18-6.
>
> Jerry Martes wrote:
>
> > I'm trying to build a 1:1 balun with minimun insertion loss for 137 MHz.
> > I have never done this before and would like to hear from someone who has
> > some experience with building and using a 1:1 balun at VHF.
> >
> > I've been trying to wind small coax inside ferrite toroids. The only
> > thing I can measuer on this balun is its impedance, but actually would like
> > to know its effect on the radiation pattern.
> >
> > At this point in my tests, I can provide 300 ohms of highly reactive
> > impedance on the outer conductor of the "RG58" type coax. At the beginning
> > of this project I assumed that I could easily get much higher impedances.
> >
> > Any information and advice will be appreciated.
> >
> > Jerry
> >
> >
>

844. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:54:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <EWBNc.17295$PK5.4900@nwrddc02.gnilink.net>
Source record: 91965

Richard

The line is 5 feet long where it is 2 inch ID (the transitions to N
connector contribute another 6 inches to the line length). The slot is 4
1/2 feet long. If the probe is restricted to the center 4 feet and the
probe is "slid" along the track, the voltage output from the probe varies
by about 1/4 of one percent with the little BNC 50 ohm load terminating the
Slotted Line.
You are doing a good job of getting me to think. I really dont know what
I'm doing. I just did it, thinking a crude line like this would provide
decent estimates of the load impedance.

I wish I had some *known mismatches* for a 50 ohm line. I may be kidding
myself when I measure the loads I've choosen.

Thanks for doing the thinking for me.
Jerry

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:fcedg0h2ug0cgefvo3r6o9ccl3447n48pp@4ax.com...
> On Tue, 27 Jul 2004 20:05:53 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> > The VSWR with the line open is about 19:1. It doesnt matter if the
line
> >has either N or BNC at its output end, opened.
>
> Hi Jerry,
>
> Opens are generally a little more difficult to nail down.
>
> However, as to measuring very high SWRs, you probably have a fair
> amount of error hidden in these determinations. When measuring high
> SWRs the problem of measuring the minima often leads to inserting the
> probe too deep into the trough to find the null. This deep insertion
> will disturb the real SWR and give you an apparent SWR. There are
> methods to recover the accuracy, but it is hardly an issue for your
> purposes, so I will not pursue that here.
>
> >I think this piece of
> >plumbing pipe does exactly what I wanted.
>
> I would agree.
>
> > At 137.50 MHz, I measure an incident voltage of 0.3 volts and a

> >reflected voltage of 0.02 volts into the Slotted Line with a 50 ohm load
on
> >its output end. I dont see any variation in reflected voltage when I
move
> >the probe or even remove it.
>
> This is not what I meant by reading the matched SWR with the Line.
> USE the line to measure the variation along its length. DO NOT use
> the arrangement of directional couplers as you have above.
>
> >The needle does wiggle a few degrees when the
> >probe is moved but that isnt measurable.
>
> My guess is that you will see very little variation along the length
> of the line. Can you confirm or negate this expectation?
>
> >I dont even know how good this Slotted Line needs to be.
>
> As accurate as you need for your measurement - that is, no or little
> residual SWR. Judging by your comments, you have obtained this. What
> I keep harping on about is the cold facts of data to remove qualifying
> statements. You have provided some of the Cardinal measuring points -
> e.g. Open/Short/50 Ohm load.
>
> > I could easily have major inaccuracies in this Line and just dont know
it
> >yet.
>
> Your doubt is unwarranted.
>
> > You introduce the possibility of measuring impedances with low VSWR.
That
> >has become kinda interesting to me since I've been reading about what
people
> >are doing with lengths of coax. Atthough I have no need for determining
> >load impedances with VSWR less than 1.5:1, it might be fun to try to
build
> >something. So far, I cant understand how to measure load impedance
> >accurately when the VSWR is under 1.5:1
>
> That is because of the sensitivity problem I have written about. You
> have great range measurements, but that is unnaturally forced.
>
> ***** This is your next step, if you skip it, you will find ***
> ***** yourself spinning your wheels with muddled results. ***
>
> Build your own 1.1:1 standard and try to measure it - this should be
> telling. It will test your skill more than the line (which appears to
> be fine), but so much of measurement at this stage is necessary skill.
> If you encounter difficulty it is NOT the line! Your limiting

> consideration is found at the detector and being able to resolve very
> small differences.
>
> Trying to do this with DC measurements from a detector is going to be
> extremely hard. You should instead re-read my comments about AC
> detectors and 1KHz meters because they are very useful for doing what
> you plan to do. I know you may not have access to this specialized
> gear, but invention "used" to be part of the craft of Ham radio
> (instead of pushing credit cards across display cases).
>
> You can use a spare receiver (it will have to be an AM VHF rig without
> AVC/AGC) in place of the detector. Use an AC meter across the speaker
> and go to town, you will have all the sensitivity in the world, and
> your meter should solve the resolution problem.
>
> 73's
> Richard Clark, KB7QHC

845. Re: New Toy

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-27 23:55:48 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <8YBNc.11040$_K2.1834@lakeread02>
Source record: 91966

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:MyzNc.180424$tH1.7688270@twister.southeast.rr.com...
> Came by an automatic antenna tunerfor free. Electronics is fried but all
the
> coils caps and relays seem to be OK. Was thinking of seting this up with a
> 30 ft vertical radiator and control the relays manually with a switch. I
> have a 20 position rotary switch. Output of theswitch would feed a diode
> encoder that would select desired relays. Any thoughts on this.
>
>

Good Lord Jim, it's a piece of junk! After all that work it still won't auto-tune so what will you have then? A broken auto-tuner. I'll sell you a great MFJ-962D cheap. I replaced it with two MFJ auto-tuners.

Jack Painter
Virginia Beach VA

846. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 00:25:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gfrdg05t8hpunkut0qc6gbvmvd0g2hfiim@4ax.com>
Source record: 91967

On Tue, 27 Jul 2004 23:54:12 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:
> The line is 5 feet long where it is 2 inch ID (the transitions to N
>connector contribute another 6 inches to the line length). The slot is 4
>1/2 feet long.

You are about to discover that building it was the easiest part of the
exercise.

>the
>probe is "slid" along the track, the voltage output from the probe varies
>by about 1/4 of one percent with the little BNC 50 ohm load terminating the
>Slotted Line.

Hi Jerry,

Sounds like just what it should do if you built it right. You've done
this several different ways so trust your work.

> You are doing a good job of getting me to think. I really dont know what
>I'm doing. I just did it, thinking a crude line like this would provide
>decent estimates of the load impedance.

It will. You now only have to increase the skill to measure a
"useful" Z rather than the absurd situations of short or open. They
were OK for a sanity check, but you really need to test the line WHERE
IT IS GOING TO WORK! That is, in the 1.1:1 to 3:1 SWR region.

This requires you make your own calibrated mismatches.
>
> I wish I had some *known mismatches* for a 50 ohm line. I may be kidding
>myself when I measure the loads I've choosen.

Enough already. You have them, you are simply not using them. I
would bet dollars to donuts you have a T connector. connect it to the
end of the line and then connect two 50 Ohm loads. BINGO! Instant
2:1 SWR mismatch load. That will give you 25 Ohms, find some way to
put the two 50 Ohm loads in series for another mismatch standard.

Go to Radio Shack and make the cheapest purchase of precision you can
afford: a range of flea-sized surface mount resistors and surface
mount capacitors. Buy several male BNC connectors and start
soldering. Another source of good 50 Ohm loads is found in Network
terminations already built into BNC connections. These suckers are
good and accurate and a drug on the market. If you couldn't find a
way to parallel 2, 3, 4, or 5 of them, you aren't trying very hard.
These all present perfectly good mismatch standards if you keep

connections short and equal. Again, this involves the one-twentieth wavelength rule (I note there has been no conflicting data from others to perturb this).

73's
Richard Clark, KB7QHC

847. Re: Hustler 4BTV / 5BTV with antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 00:26:05 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4106f29e$0$2631$39cecf19@news.twtelecom.net>
Source record: 91968

Carl R. Stevenson wrote:

> Walt,
>
> You are correct in remembering that damage can occur to the traps. The
> manufacturer *specifically* warns against using a tuner to try to "stretch"
> the 4/5BTV to bands for which it wasn't designed.
>
> As for at what (low) power you might be able to "safely" get away with it, I
> don't know ... I have not even tried using my FT-817 (5W) into the 5BTV
> with the Z-11 autotuner, having had the finals fail catastrophically once
> for NO reason (no bad load, no overvoltage, nothing ...) Fortunately, since
> the finals were replaced, the 817 is good as new and I want to keep it that
> way :-)
>
> You could always consider hanging a simple wire dipole or a random wire with
> a tuner for 30m if you just want to operate PSK casually.
>
> 73,
> Carl - wk3c
>
>

Hmm, I had a 40m switching diode fail short which took out rcv on 6m
(7th harmonic), but nothing like your problem. I believe mine had to do
with very high RF fields from 6m during a June VHF QSO party.

I also run a Z11 into a Gap, and use it a lot to match to 30 and 17.
What were the circumstances when the finals failed? Sounds like you
were running into a good load, but you didn't quite say that.

tom
K0TAR

848. Re: New Toy

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 01:31:58 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <imDNc.3328$AY5.170@newssvr21.news.prodigy.com>
Source record: 91970

Pretty much agree with Jack-- the only tuner that was automatic, and
designed to withstand VERY high impedence mis-matchs was the Heathkit
(even kw rated, to longwire if memory serve correct) and these ain't
dainty! The new breed of them Yaesu, Kenwood, Icom, ect that matched the
rigs , are designed for (in their spec books), a maximum of 3:1 swr
(and this at 100 watts)! tho, in truth, will handle wider range, above
5-6: to 1, usually start arcing because of the flakey impedence shifts!
Must admit, to all, that these probably more suited to tune the input
for an AMP, than a useful antenna matcher!
Jim NN7K

Jack Painter wrote:
> "Jimmie" <Gfender@carolina.rr.com> wrote in message
> news:MyzNc.180424$tH1.7688270@twister.southeast.rr.com...
>
>>Came by an automatic antenna tunerfor free. Electronics is fried but all
>
> the
>
>>coils caps and relays seem to be OK. Was thinking of seting this up with a
>>30 ft vertical radiator and control the relays manually with a switch. I
>>have a 20 position rotary switch. Output of theswitch would feed a diode
>>encoder that would select desired relays. Any thoughts on this.
>>
>>
>
>
> Good Lord Jim, it's a piece of junk! After all that work it still won't
> auto-tune so what will you have then? A broken auto-tuner. I'll sell you a
> great MFJ-962D cheap. I replaced it with two MFJ auto-tuners.
>
> Jack Painter
> Virginia Beach VA
>
>

849. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 01:32:02 UTC
From: Kent <kaw61@yahoo.com>
Message-ID: <lIDNc.44285$6t1.5375@twister.rdc-kc.rr.com>
Source record: 91969

Yes a bidirectional antenna. These antennas will feed a repeater that will have it own antenna (well seperated) so cavities will not be needed.

"Jerry Martes" <j.jmartes@verizon.net> wrote in message news:%6ZMc.7439$Nu4.3186@nwrddc01.gnilink.net...
> Kent
>
> Do you mean that the two Yagis will be fed together to produce a radiation
> pattern with two beams pointing away from each other??
> I would submit that a bidirectional antenna could be built that way.
>
> Jerry
>
>
>
> "Kent" <kwinrich@wi.rr.com> wrote in message
> news:lNbMc.33583$6t1.19197@twister.rdc-kc.rr.com...
> > I am working with a client that needs to have directional yagis, pointed
> 180
> > from each other, for a cell phone repeater.
> >
> > I was thinking about using 1/2 wave lines and putting them into a "TEE".
> >
> > Any suggestions?
> >
> > THANKS!
> >
> > Kent
> > K9EZ
> >
> >
>
>

850. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 01:59:10 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <OLDNc.3331$AY5.2329@newssvr21.news.prodigy.com>
Source record: 91871

Ye-Gads! Why so Complicated?? and, Complex? wouldn't a bandwidth of aprox. 6 MHz be sufficient? And, why, pray, so LONG? for 137.5 MHz center?? in short, whats the matter with a Sleeve- 1/4 wave length long CHOKE BALUN ? These are quite easy to construct from copper tubeing, and wire (KLM antennas did these for years for 2 meter, and up yagis), and can easily change impedence for , say 50- 72 ohm matching (simply convert the base impedence to 61.23 ohm impedence- the length stays the same!
For reference, look for an article from QST called the "BEER CAN BALUN" altho, sadly, beer cans are no longer made of steel, and openable at both ends with a can opener!(so they could be soldered to), but, that does NOT NEGATE THE THEORY INVOLVED!! One simply constructs the COAX, with a torch, and then, AT ONE END, 1/4 wave down the section, SOLDER A third, larger diameter piece of copper tubeing to ON END of the recently made coax! If more bandwidth is needed, would expect that ferrite (for the want of better word "beads", the size of the outter shieth of coax, be stacked end to end for about 25-30 inchs, on your coax . For your consideration- Jim NN7K

Richard Clark wrote:

> On Tue, 27 Jul 2004 23:54:12 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>> The line is 5 feet long where it is 2 inch ID (the transitions to N
>>connector contribute another 6 inches to the line length). The slot is 4
>>1/2 feet long.
>
>
> You are about to discover that building it was the easiest part of the
> exercise.
>
>
>>the
>>probe is "slid" along the track, the voltage output from the probe varies
>>by about 1/4 of one percent with the little BNC 50 ohm load terminating the
>>Slotted Line.
>
>
> Hi Jerry,
>
> Sounds like just what it should do if you built it right. You've done
> this several different ways so trust your work.
>
>

>> You are doing a good job of getting me to think. I really dont know what
>>I'm doing. I just did it, thinking a crude line like this would provide
>>decent estimates of the load impedance.
>
>
> It will. You now only have to increase the skill to measure a
> "useful" Z rather than the absurd situations of short or open. They
> were OK for a sanity check, but you really need to test the line WHERE
> IT IS GOING TO WORK! That is, in the 1.1:1 to 3:1 SWR region.
>
> This requires you make your own calibrated mismatches.
>
>> I wish I had some *known mismatches* for a 50 ohm line. I may be kidding
>>myself when I measure the loads I've choosen.
>
>
> Enough already. You have them, you are simply not using them. I
> would bet dollars to donuts you have a T connector. connect it to the
> end of the line and then connect two 50 Ohm loads. BINGO! Instant
> 2:1 SWR mismatch load. That will give you 25 Ohms, find some way to
> put the two 50 Ohm loads in series for another mismatch standard.
>
> Go to Radio Shack and make the cheapest purchase of precision you can
> afford: a range of flea-sized surface mount resistors and surface
> mount capacitors. Buy several male BNC connectors and start
> soldering. Another source of good 50 Ohm loads is found in Network
> terminations already built into BNC connections. These suckers are
> good and accurate and a drug on the market. If you couldn't find a
> way to parallel 2, 3, 4, or 5 of them, you aren't trying very hard.
> These all present perfectly good mismatch standards if you keep
> connections short and equal. Again, this involves the one-twentieth
> wavelength rule (I note there has been no conflicting data from others
> to perturb this).
>
> 73's
> Richard Clark, KB7QHC

851. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 02:05:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p62eg0t6qcdgbah419a49grum4vdhikd1c@4ax.com>
Source record: 91872

On Wed, 28 Jul 2004 01:59:10 GMT, Jim - NN7K
<nn7kexk7zfg@sbcglobal.net> wrote:

>Ye-Gads! Why so Complicated?? and, Complex?

Hi Jim,

This is not about BalUns. This recent round of correspondence relates
to one style of BalUn that is easily constructed to offer a means to
test Jerry's SWR bench. He already has a very good BalUn built,
tested, and in service.

73's
Richard Clark, KB7QHC

852. Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 02:26:52 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <0Judnadg35REk5rcRVn-qw@comcast.com>
Source record: 91873

OLD tech here..

The original RCA Theremins used a large antenna coil below the antenna, to make the instrument more playable. Unfortunately, not much information remains, especially exactly what the theory was behind their selection of values.

http://home.att.net/~theremin1/RCA/rca_theremin.html

At 200kHz, were these antenna coils at self resonance? Near? If so, how far away?

I'm looking to translate this to a 750-800kHz design, but I'm not sure how to design the coils.
I'm considering winding the coils by putting down two strands of modern magnet wire, on lexan forms, then removing one strand, getting roughly the same winding pitch and Q as the originals.

--
A: Because it messes up the order in which people normally read text.
Q: Why is top-posting such a bad thing?
A: Top-posting.
Q: What is the most annoying thing on usenet?

853. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 02:45:17 UTC
From: Kent <kaw61@yahoo.com>
Message-ID: <ZpENc.44819$6t1.34674@twister.rdc-kc.rr.com>
Source record: 91874

The two antennas will feed a repeater that will have its own antenna (well seperated) so no cavities will be needed.

I did do some search on stacking antennas with very little help (believe it or not). I did find a few sites with help, but I also thought I would would get a second opinion here.

"Jim - NN7K" <nn7kexk7zfg@sbcglobal.net> wrote in message news:aVYMc.2487$AY5.2273@newssvr21.news.prodigy.com...
> For openers, NO it wont work-- to get 2 antennas AT THE same FREQ range
> to work, requires at minimum, a power devider, or at least 2- 75 ohm 1/4
> wavelength(or odd multiples thereof) lenghts of coax to that 50 ohm
> feedpoint ("TEE Fitting") and, dont forget to figure in the VELOCITY
> FACTOR ! See any reference about "Stacking antennas", or "Impedence
> transformers". This MIGHT work, IF the repeater has isolation-- not
> just two cell phones tied back to back, then fed into the same coax !
> Mean full repeater- complete with cavities, filters, ect! Jim NN7K
>
>
> Kent wrote:
>
> > "Kent" <kwinrich@wi.rr.com> wrote in message
> > news:lNbMc.33583$6t1.19197@twister.rdc-kc.rr.com...
> > >
> >>I am working with a client that needs to have directional yagis, pointed
> > >
> > 180
> > >
> >>from each other, for a cell phone repeater.
> >>
> >>I was thinking about using 1/2 wave lines and putting them into a "TEE".
> >>
> >>Any suggestions?
> >>
> >>THANKS!
> >>
> >>Kent
> >>K9EZ
> >>
> >>
> > >
> > FYI the two antennas are going to be fed into a cell phone repeater that
> > will have its own antenna. We need to cover directions 180 from each other.
> > >

> >

854. Re: New Toy

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 02:58:10 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <7DENc.11063$_K2.8617@lakeread02>
Source record: 91875

"Jim - NN7K" <nn7kexk7zfg@sbcglobal.net> wrote
> Pretty much agree with Jack-- the only tuner that was automatic, and
> designed to withstand VERY high impedence mis-matchs was the Heathkit
> (even kw rated, to longwire if memory serve correct) and these ain't
> dainty! The new breed of them Yaesu, Kenwood, Icom, ect that matched the
> rigs , are designed for (in their spec books), a maximum of 3:1 swr
> (and this at 100 watts)! tho, in truth, will handle wider range, above
> 5-6: to 1, usually start arcing because of the flakey impedence shifts!
> Must admit, to all, that these probably more suited to tune the input
> for an AMP, than a useful antenna matcher!
> Jim NN7K

Jim, used very tenderly (no more than 500w), the new MFJ-994 is a good performer so far. Likewise the MFJ-993 works well at 125w. I have used both on a dipole and voltage-fed longwire. On the dipole, it flattens the once perfect-resonance but stretched from age swr back into1:1 again, and works well and fast on frequencies several bands above. Before those ATU's I was quite pleased with the MFJ-962D at 1,000w it has never arced before.

Jack

>
> Jack Painter wrote:
> > "Jimmie" <Gfender@carolina.rr.com> wrote
> >
> >>Came by an automatic antenna tunerfor free. Electronics is fried but all
> >
> > the
> >
> >>coils caps and relays seem to be OK. Was thinking of seting this up with
a
> >>30 ft vertical radiator and control the relays manually with a switch. I
> >>have a 20 position rotary switch. Output of theswitch would feed a diode
> >>encoder that would select desired relays. Any thoughts on this.
> >>
> >>
> >
> >
> > Good Lord Jim, it's a piece of junk! After all that work it still won't
> > auto-tune so what will you have then? A broken auto-tuner. I'll sell you
a
> > great MFJ-962D cheap. I replaced it with two MFJ auto-tuners.
> >
> > Jack Painter
> > Virginia Beach VA

> >
> >

855. Re: Does external antenna negate the built in

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 03:08:30 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <OMENc.11065$_K2.8498@lakeread02>
Source record: 91876

"James" <jrapier@dcr.net> wrote in message
news:W4yNc.40$79.39@fe39.usenetserver.com...
> I recently bought a Tecsun BCL 2000, clone of a Grundig S350. I noticed
that
> using an external antenna on medium wave seems to leave the built in one
> still active. Rotating the radio itself seems to change the signal
strength.
>
> The radio is manual tuning only with no presets but seems to be a very
good
> box. As you might tell, I am a novice at this and didn't plunge into big
> bucks on a radio before checking my interests. I did put up a long wire
> antenna (about 70 feet) and jammed a very thick copper wire into the
ground
> like a wicket about 18 inches for the ground.
>
> The radio works well but I was under the impression that the built in
would
> not be active on medium wave when external is used. Apparently I'm wrong
as
> the external input is just a wire lock arrangement and not a jacked input.
> This brings up another question. I have a radio shack longwire antenna in
a
> wind up case for use indoors where the outside antenna is not practical.
> It's 23 feet long and used for extending the whip for FM and shortwave. So
> is the whip active as well as the built in for medium wave?
>
> Any insight on the arrangement of these things would be appreciated.
>

James, if your radio is similar to the Grundig YB PE400, yes. I always
collapsed and stowed the whip antenna when using an external, either inside
retractable wire or external long wire. Otherwise, moving or bumping the
radio tended to craete static when the whip was touched or moved.

cheers,

Jack
Virginia Beach

856. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 03:29:44 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <J4FNc.11069$_K2.4452@lakeread02>
Source record: 91877

"Dave Platt" <dplatt@radagast.org> wrote

> http://home.hamlab.com:225/radio/hardline.htm shows one method for
> homebrewing a hardline-to-N connector, using a standard N-connector
> and a hardware-store 1/2" compression butt fitting. Haven't tried it
> myself but it looks workable and not too difficult to do (I almost
> wrote "not too difficult to pull off" but that gives precisely the
> wrong message :-)

LOL Dave. Well, if it didn't "pull off too easily" - I wish someone would go in business making them then. Sure a lot cheaper than Andrews Corp one would hope!

Jack
Virginia Beach

857. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 04:38:11 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <O4GNc.46909$yF.46250@bignews2.bellsouth.net>
Source record: 91878

yep, if on the same freqs
but not the radio - unless its digital

"wolfee" <clambrain@com.invalid> wrote in message
news:8kBNc.142435$OB3.141274@bgtnsc05-news.ops.worldnet.att.net...
> I just bought a Terk Advantage antenna. It really does help my cheap
little
> table top radio get stations a lot farther away. Will I still be able to
> use it when digital AM radio arrives?
>
>

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Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004

858. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 09:51:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10getpefk4ho9e4@corp.supernews.com>
Source record: 91879

Richard Clark wrote:

> On Mon, 26 Jul 2004 19:59:41 -0700, Wes Stewart <n7ws_@_yahoo.com>
> wrote:
>
>
>>I hope by the last you mean the length needs to be minimized while
>>making the measurements and not in the application.
>
>
> I hope that was obvious by follow-up questions - viz. the short loop
> of wire described in the measurements.

Sorry, I had missed that context. I completely agree with your advice that this length be kept short. There should be no limit on the length of the wire used for the finished (1:1) balun, and I now understand that you didn't intend to imply that there was.

> Further, if there are a number of beads to add, having them spread
> along a full wavelength would not seem as beneficial as within a tight
> group. If that tight group were remote from the feedpoint, it would
> also suggest that the distance would offer a means to drive the
> intervening section into radiation.
>
> If you or Roy have conflicting data to this surmise, now is the time
> to reveal it. That is, if there is no need to regard grouping, please
> provide context. In other words how much isolation is provided with,
> say, 20 beads spread over a quarter wave instead of a twentieth wave.
> Further, how much isolation is provided with, say, 20 beads located
> half a wave away from the fed end in contrast to within a twentieth
> wave of the fed end.

There are two ways current can be caused to flow on the outside of a feedline, by conduction and by coupling. An example of pure conduction is a dipole fed with a symmetrically placed coax line. In that case, the conduction is prevented by putting a balun at the antenna feedpoint. But current due to coupling can be more difficult to suppress, since the balun guarantees only that the current at the position of the balun will be low. In some cases, all it accomplishes is to move the current maximum to a different part of the line; in others, it ends up suppressing the current on the entire line. A method that insures suppression is to put baluns about every quarter wavelength, since no substantial current distribution can exist with a forced node at this interval. However, that's usually overkill, and a single balun is often sufficient. The optimum position, however, has to be determined for the

individual case by modeling or experimentation.

I don't know of any work that's been done on comparing various balun distribution schemes, and the results would be interesting. It does seem to me, though, that you wouldn't want to space moderately resistive beads along a line, since this could result in significant loss. From that standpoint, it would be best to have localized regions of high resistance.

Roy Lewallen, W7EL

859. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 10:49:10 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <GwLNc.16773$iK.11611@newsread2.news.atl.earthlink.net>
Source record: 91880

> > I just bought a Terk Advantage antenna. It really does help my cheap
> little
> > table top radio get stations a lot farther away. Will I still be able
to
> > use it when digital AM radio arrives?
> >
> >I wouldn't hold your breath waiting for digital AM
>
>
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> Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
>
>

860. Re: Halle Berry naked

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 10:49:51 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <jxLNc.16774$iK.12022@newsread2.news.atl.earthlink.net>
Source record: 91881
Cross-posted to: japan.app.postpet,hannover.fundgrube,alt.military.police,alt.engr.dynamics,rec.radio.amateur.antenna,rec.arts.sf.movies,han.soc.culture.chejudo,es.humanidades.gramatica

> Halle Berry naked Halle Berry naked Halle Berry naked Halle Berry naked
>
>
>Who cares.
>
>

861. Ham Found Well Hung

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 11:53:13 UTC
From: Dave <no-spam@hotmail.com>
Message-ID: <opsbujayhhfhf5bh@main.mshome.net>
Source record: 91883

With biggus dickus rather longus dickus.

862. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 12:10:07 UTC
From: RADIOTWO <steveremovewright@ntlworld.com>
Message-ID: <zIMNc.484$89.467@newsfe3-gui.ntli.net>
Source record: 91882

> I just bought a Terk Advantage antenna. It really does help my cheap
little
> table top radio get stations a lot farther away. Will I still be able to
> use it when digital AM radio arrives?
>
I will tell you when Digital AM radio arrives !!!

Steve

863. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 12:36:44 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <n5NNc.2350$79.1481@fe39.usenetserver.com>
Source record: 91884

And what does the cell phone company think of this?

Not to mention the FCC.

--
Jim
N8EE

to email directly, send to my call sign at arrl dot net

864. Re: Does external antenna negate the built in

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 14:17:40 UTC
From: James <jrapier@dcr.net>
Message-ID: <8AONc.2466$79.1875@fe39.usenetserver.com>
Source record: 91885

"Jack Painter" <223bthp@cox.net> wrote in message
news:OMENc.11065$_K2.8498@lakeread02...
>
> "James" <jrapier@dcr.net> wrote in message
> news:W4yNc.40$79.39@fe39.usenetserver.com...
> > I recently bought a Tecsun BCL 2000, clone of a Grundig S350. I noticed
> that
> > using an external antenna on medium wave seems to leave the built in one
> > still active. Rotating the radio itself seems to change the signal
> strength.
> >
> > The radio is manual tuning only with no presets but seems to be a very
> good
> > box. As you might tell, I am a novice at this and didn't plunge into big
> > bucks on a radio before checking my interests. I did put up a long wire
> > antenna (about 70 feet) and jammed a very thick copper wire into the
> ground
> > like a wicket about 18 inches for the ground.
> >
> > The radio works well but I was under the impression that the built in
> would
> > not be active on medium wave when external is used. Apparently I'm wrong
> as
> > the external input is just a wire lock arrangement and not a jacked
input.
> > This brings up another question. I have a radio shack longwire antenna
in
> a
> > wind up case for use indoors where the outside antenna is not practical.
> > It's 23 feet long and used for extending the whip for FM and shortwave.
So
> > is the whip active as well as the built in for medium wave?
> >
> > Any insight on the arrangement of these things would be appreciated.
> >
>
> James, if your radio is similar to the Grundig YB PE400, yes. I always
> collapsed and stowed the whip antenna when using an external, either
inside
> retractable wire or external long wire. Otherwise, moving or bumping the
> radio tended to craete static when the whip was touched or moved.
>
> cheers,
>

> Jack
> Virginia Beach
>
No. The whip antenna is for shortwave and FM. There is a built-in ferrite antenna for medium wave and external connection for AM/shortwave. After pondering over it I think the whip and the ferrite are both active at the same time as well as any external.

865. Re: 2M homemade colinear designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 14:57:59 UTC
From: VK3KCG <VK3KCG@nospamamsat.org>
Message-ID: <4107beda$0$12389$afc38c87@news.optusnet.com.au>
Source record: 91886

Very clever and smart design, just wondering about the WL/D interactions for higher frequencies? Impressive home page as well, keep those snazzy designs coming.

Peter

--
http://dxantennas.com

http://802antennas.com
"Ross Anderson" <ross_anderson@comcast.net> wrote in message
news:1cb0099f.0407262144.76038747@posting.google.com...
> Hi Larry
>
> Here is a simple colinear I designed for 2 meters.
>
> http://home.comcast.net/~ross_anderson/sc.htm
>
> Ross W1HBQ
>
> Larry Gagnon <lagagnon@fakeuniserve.com> wrote in message
news:<pan.2004.06.26.22.56.04.291812@fakeuniserve.com>...
> > Am looking for some links to homebrew designs for a base station 2M
> > colinear (two stacked 5/8 wave type). I prefer something simple made
from
> > PVC and wire. Any ideas considered.
> >
> > Larry VE7EA

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Version: 6.0.729 / Virus Database: 484 - Release Date: 28/07/2004

866. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 15:28:25 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <4107C619.8090809@myrealbox.com>
Source record: 91888

Dave Shrader wrote:
> Well Paul, below 30 MHz is NOT CB radio. If you operate there and FCC
> finds you, you will face very stiff fines up to $10,000.
>
> CB radio is confined to 40 specific channels in the 27 to 27.5 MHz
> frequency range.
>
> Be careful!!
>
> paul wrote:
>
>> below 30 mhz is cb radio... evry one is free to talk thar!!!..in the
>> state of cali anny way ...if you can not help me then no not ancer my
>> post...
>>
>

He is just a troll looking for responses. Just ignore him.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

867. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 15:34:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vjffg0lujt6mjp2phmb9m5bebi8g4tsfpb@4ax.com>
Source record: 91887

On Tue, 27 Jul 2004 21:26:52 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>OLD tech here..
>
>The original RCA Theremins used a large antenna coil below the antenna, to
>make the instrument more playable. Unfortunately, not much information
>remains, especially exactly what the theory was behind their selection of
>values.
>
>http://home.att.net/~theremin1/RCA/rca_theremin.html
>
>At 200kHz, were these antenna coils at self resonance? Near? If so, how
>far away?
>
>I'm looking to translate this to a 750-800kHz design, but I'm not sure how
>to design the coils.
>I'm considering winding the coils by putting down two strands of modern
>magnet wire, on lexan forms, then removing one strand, getting roughly the
>same winding pitch and Q as the originals.

Hi Dave,

I guess I will bite here.

This is a curious work from the museum of tubes. In glancing around
the page I note there is actually a lot of symmetry of design,
especially with the oscillators. I also note that there are some
missing component values, for instance, and notably, C11 and C12.

Through symmetry, it is also apparent that the reference oscillator
cap, C16, is mimicked by the T9 antenna loading circuit. I say this
because the pitch variable oscillator has no cap that corresponds, but
the function of fine frequency control is obviously practiced here.

Reading about the Volume Circuit and viewing its design, we also see a
symmetry here too. However, the discussion of T3 and T9 "resonances"
are something of stretch (having nothing to do with oscillation), but
useful as a metaphor. The function of either of these circuits is to
aid in the hand's capacitance in "pulling" loads.

As for your question about quadrupling the frequencies involved, I
would echo: Why?

There are any number of issues that would need to be balanced here,
and they all start with the hand capacitance which, presumably,
remains the same over the ages. There is the mechanism of pulling and

plate resistance coupled with these loads and their Z. If you shift the load Z by making smaller inductances (which follows from the reduction of the coil to attend the increase in frequency) you then shift the load line. This could make for a very difficult to control Theremin where the hand movements are too very close, or are forced to be much closer (depending upon the new dynamics introduced) compared to former operation. Same thing goes if you choose to reduce the capacitances of the frequency determining capacitors in the oscillators; then the hand capacitance becomes more significant and range changes become greater (the Theremin is more sensitive).

Throughout, I was presuming you have access to tubes as specified. For much of the circuitry, this is not too demanding (modern twin triodes would probably work as well). However, when we get to the Volume control circuit, you definitely need power transfer to light up the filament of V5 and its transconductance properties are intimately tied into the successful operation. This means V6 cannot slouch in the power department. The reference and pitch oscillators, and the mixer are pretty conventional as is the AF power amp.

Returning to the question of coil construction. There is nothing sacred there. I wouldn't worry about Q because one wire diameter pitch is not the best (3 is better) so the original designers didn't really care either. As for resonance, these circuits are swamped by 2200pF, interwinding capacitance hardly enters into the picture. If they are resonant, they are series resonant.

73's
Richard Clark, KB7QHC

868. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 15:46:36 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <ergfg0triv4g7r5jrucknu6ovr0guu60hb@4ax.com>
Source record: 91889

On Wed, 28 Jul 2004 02:51:37 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

|Richard Clark wrote:
|
|> On Mon, 26 Jul 2004 19:59:41 -0700, Wes Stewart <n7ws_@_yahoo.com>
|> wrote:
|>
|>
|>>I hope by the last you mean the length needs to be minimized while
|>>making the measurements and not in the application.
|>
|>
|> I hope that was obvious by follow-up questions - viz. the short loop
|> of wire described in the measurements.
|
|Sorry, I had missed that context. I completely agree with your advice
|that this length be kept short. There should be no limit on the length
|of the wire used for the finished (1:1) balun, and I now understand that
|you didn't intend to imply that there was.
|>
|> Further, if there are a number of beads to add, having them spread
|> along a full wavelength would not seem as beneficial as within a tight
|> group. If that tight group were remote from the feedpoint, it would
|> also suggest that the distance would offer a means to drive the
|> intervening section into radiation.
|>
|> If you or Roy have conflicting data to this surmise, now is the time
|> to reveal it. That is, if there is no need to regard grouping, please
|> provide context. In other words how much isolation is provided with,
|> say, 20 beads spread over a quarter wave instead of a twentieth wave.
|> Further, how much isolation is provided with, say, 20 beads located
|> half a wave away from the fed end in contrast to within a twentieth
|> wave of the fed end.
|
|There are two ways current can be caused to flow on the outside of a
|feedline, by conduction and by coupling. An example of pure conduction
|is a dipole fed with a symmetrically placed coax line. In that case, the
|conduction is prevented by putting a balun at the antenna feedpoint. But
|current due to coupling can be more difficult to suppress, since the
|balun guarantees only that the current at the position of the balun will
|be low. In some cases, all it accomplishes is to move the current
|maximum to a different part of the line; in others, it ends up
|suppressing the current on the entire line. A method that insures

|suppression is to put baluns about every quarter wavelength, since no
|substantial current distribution can exist with a forced node at this
|interval. However, that's usually overkill, and a single balun is often
|sufficient. The optimum position, however, has to be determined for the
|individual case by modeling or experimentation.

I did put together a simple model and pretty much satisfied myself
that it can be done by modeling, although, I've got better things to
do right now.

The model can be a simple horizontal free-space dipole with an
additional wire normal to the dipole connected to one side of the
feedpoint. (I believe this is your idea) A short (one-segment) wire
contains the source, a pair of wires comprise the dipole and a fourth,
variable length wire represents the "coax".

Loads can be placed on the "coax" of various impedances and positions.
Looking at the vertical E field response gives a measure of the
suppression of radiation from the "coax". Of course in this case it
appears that having the load at the feedpoint is optimum as expected.

While I didn't explore it further, I believe that if the "coax" angle
with respect to the dipole is changed to other than 90 degrees, and
the length is fiddled with, coupling will result and then other load
positions might be more effective in suppressing unwanted radiation.

|
|I don't know of any work that's been done on comparing various balun
|distribution schemes, and the results would be interesting. It does seem
|to me, though, that you wouldn't want to space moderately resistive
|beads along a line, since this could result in significant loss. From
|that standpoint, it would be best to have localized regions of high
|resistance.

This is confusing to me. Isn't "loss" what we're after with a balun?
And if suppression of effects of coupling to the line is the goal over
considerable bandwidth then I suggest that distributed loss might be
the way to go. Thus my slightly tongue-in-cheek comment about loading
the whole length of coax with ferrite.

Regards,

Wes

869. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 16:03:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v8jfg094smq9ng0ci1602df7usqhqkdl8f@4ax.com>
Source record: 91890

On Wed, 28 Jul 2004 08:46:36 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:

>|I don't know of any work that's been done on comparing various balun
>|distribution schemes, and the results would be interesting. It does seem
>|to me, though, that you wouldn't want to space moderately resistive
>|beads along a line, since this could result in significant loss. From
>|that standpoint, it would be best to have localized regions of high
>|resistance.
>
>This is confusing to me. Isn't "loss" what we're after with a balun?

Ditto.

>And if suppression of effects of coupling to the line is the goal over
>considerable bandwidth then I suggest that distributed loss might be
>the way to go. Thus my slightly tongue-in-cheek comment about loading
>the whole length of coax with ferrite.

Hi Wes,

I have built one (not difficult, obviously), but testing is a bit less
conclusive. All I can say is that it didn't hurt. I anticipated
using it where the line might upset fields and affect lobe
performance. I also used it in combination with the standard one foot
long design. However, having said that, I only used it in field day
set-ups where no antenna was particularly hi-tuned.

73's
Richard Clark, KB7QHC

870. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 16:39:25 UTC
From: wolfee <clambrain@com.invalid>
Message-ID: <1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net>
Source record: 91891

I thought it was already here. ibiquity lists stations broadcasting and
manufacturers delivering digital receivers right now.

"RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
>
> > I just bought a Terk Advantage antenna. It really does help my cheap
> little
> > table top radio get stations a lot farther away. Will I still be able
to
> > use it when digital AM radio arrives?
> >
> I will tell you when Digital AM radio arrives !!!
>
> Steve
>
>
>

871. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 17:02:15 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <r_QNc.17164$Nu4.5638@nwrddc01.gnilink.net>
Source record: 91892

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:ergfg0triv4g7r5jrucknu6ovr0guu60hb@4ax.com...
> On Wed, 28 Jul 2004 02:51:37 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> |Richard Clark wrote:
> |
> |> On Mon, 26 Jul 2004 19:59:41 -0700, Wes Stewart <n7ws_@_yahoo.com>
> |> wrote:
> |>
> |>
> |>>I hope by the last you mean the length needs to be minimized while
> |>>making the measurements and not in the application.
> |>
> |>
> |> I hope that was obvious by follow-up questions - viz. the short loop
> |> of wire described in the measurements.
> |
> |Sorry, I had missed that context. I completely agree with your advice
> |that this length be kept short. There should be no limit on the length
> |of the wire used for the finished (1:1) balun, and I now understand that
> |you didn't intend to imply that there was.
> |>
> |> Further, if there are a number of beads to add, having them spread
> |> along a full wavelength would not seem as beneficial as within a tight
> |> group. If that tight group were remote from the feedpoint, it would
> |> also suggest that the distance would offer a means to drive the
> |> intervening section into radiation.
> |>
> |> If you or Roy have conflicting data to this surmise, now is the time
> |> to reveal it. That is, if there is no need to regard grouping, please
> |> provide context. In other words how much isolation is provided with,
> |> say, 20 beads spread over a quarter wave instead of a twentieth wave.
> |> Further, how much isolation is provided with, say, 20 beads located
> |> half a wave away from the fed end in contrast to within a twentieth
> |> wave of the fed end.
> |
> |There are two ways current can be caused to flow on the outside of a
> |feedline, by conduction and by coupling. An example of pure conduction
> |is a dipole fed with a symmetrically placed coax line. In that case, the
> |conduction is prevented by putting a balun at the antenna feedpoint. But
> |current due to coupling can be more difficult to suppress, since the
> |balun guarantees only that the current at the position of the balun will
> |be low. In some cases, all it accomplishes is to move the current

> |maximum to a different part of the line; in others, it ends up
> |suppressing the current on the entire line. A method that insures
> |suppression is to put baluns about every quarter wavelength, since no
> |substantial current distribution can exist with a forced node at this
> |interval. However, that's usually overkill, and a single balun is often
> |sufficient. The optimum position, however, has to be determined for the
> |individual case by modeling or experimentation.
>
> I did put together a simple model and pretty much satisfied myself
> that it can be done by modeling, although, I've got better things to
> do right now.
>
> The model can be a simple horizontal free-space dipole with an
> additional wire normal to the dipole connected to one side of the
> feedpoint. (I believe this is your idea) A short (one-segment) wire
> contains the source, a pair of wires comprise the dipole and a fourth,
> variable length wire represents the "coax".
>
> Loads can be placed on the "coax" of various impedances and positions.
> Looking at the vertical E field response gives a measure of the
> suppression of radiation from the "coax". Of course in this case it
> appears that having the load at the feedpoint is optimum as expected.
>
> While I didn't explore it further, I believe that if the "coax" angle
> with respect to the dipole is changed to other than 90 degrees, and
> the length is fiddled with, coupling will result and then other load
> positions might be more effective in suppressing unwanted radiation.
>
> |
> |I don't know of any work that's been done on comparing various balun
> |distribution schemes, and the results would be interesting. It does seem
> |to me, though, that you wouldn't want to space moderately resistive
> |beads along a line, since this could result in significant loss. From
> |that standpoint, it would be best to have localized regions of high
> |resistance.
>
> This is confusing to me. Isn't "loss" what we're after with a balun?
> And if suppression of effects of coupling to the line is the goal over
> considerable bandwidth then I suggest that distributed loss might be
> the way to go. Thus my slightly tongue-in-cheek comment about loading
> the whole length of coax with ferrite.
>
>
> Regards,
>
> Wes

Wes

Let me begin by identifying myself. I'm an old guy who doesnt know much
about current electronic technology. I'm just having fun with this project

of making a home made antenna that isnt expected to perform as well as designs that are already available.

I thought the loss in the dissipative ferrite tubes slipped over the coax's outer conductor might absorb some "power", and thereby introduce an overall insertion loss.

If I was adequately articulate I'd try to make myself more clear. I have a dipole with a coax feeding it and at right angle to it. I considered the 'one half of the dipole' that connects to the coax center conductor. I thought the other half of the dipole is then a V shaped conductor made up of the 'other half', and the feed line outer conductor. When the outer conductor is covered with high loss ferrites, I thought there would be excessive (maybe unnecessary) loss introduced in that V shaped half of the radiator.

I consider myself a successful since I've been able to get such good information from this group, even if I cant get this antenna to work.

Jerry

872. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 17:10:48 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <hanfg0942i5mtn3chsahhn9r6kri2bhurq@4ax.com>
Source record: 91893

On Tue, 27 Jul 2004 16:30:58 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:

>On Tue, 27 Jul 2004 11:36:58 +0800, Dan Jacobson <jidanni@jidanni.org>
>wrote:
>
>|From the cable TV company's garbage pile, one has access to tons of 75
>|ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?
>
>Ideas:
>
>1) Use as is. At h-f this is a viable solution.
>
>2) For single-band use, there are any number of ways to match each
>end to 50-ohm. You could stub match at each end, use geometric mean
>1/4 wavelength line sections at each end, or series-section
>(alternating 50 and 75 ohm sections) at each end.
>
>3) At h-f, you could use wound broadband transformers.
>
>4) Don't use it at all. "Free" isn't necessarily free after you
>factor in the expense of doing the matching and fabricating one-off
>connectors. A 125' length of decent coax isn't that expensive.

If you're using a rig with pi-network output, use the 75-ohm line as if it were 50-ohm line. When you tune up you' ll not know the difference.

If you're using a rig with solid-state output without a tuner you may have a problem. But with a tuner, use it in place of 50-ohm line--you'll still not know the difference.

Walt, W2DU

873. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 17:31:27 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <XpGdnST0E55zf5rcRVn-hA@comcast.com>
Source record: 91894

> Through symmetry, it is also apparent that the reference oscillator
> cap, C16, is mimicked by the T9 antenna loading circuit. I say this
> because the pitch variable oscillator has no cap that corresponds, but
> the function of fine frequency control is obviously practiced here.

That's central to how the pitch circuit works. It's two oscillators mixed to product an audio product.

> Reading about the Volume Circuit and viewing its design, we also see a
> symmetry here too. However, the discussion of T3 and T9 "resonances"
> are something of stretch (having nothing to do with oscillation), but
> useful as a metaphor. The function of either of these circuits is to
> aid in the hand's capacitance in "pulling" loads.

The volume on these units, works by sweeping the osc across a bandpass filter, converting FM to AM, and then taking that rectified energy and lighting the filament with it.
I won't use that approach, NS makes a fine VCA chip.

> As for your question about quadrupling the frequencies involved, I
> would echo: Why?

I have an existing unit that is designed for this range, and I'm trying to translate the design up.

There is the mechanism of pulling and
> plate resistance coupled with these loads and their Z. If you shift
> the load Z by making smaller inductances (which follows from the
> reduction of the coil to attend the increase in frequency) you then
> shift the load line.

I don't follow here. What's the load line?

> This could make for a very difficult to control
> Theremin where the hand movements are too very close, or are forced to
> be much closer (depending upon the new dynamics introduced) compared
> to former operation.

We'd like them to be linear, aka one octave is the same size as another.

> Same thing goes if you choose to reduce the
> capacitances of the frequency determining capacitors in the
> oscillators; then the hand capacitance becomes more significant and
> range changes become greater (the Theremin is more sensitive).

Right. Recent designs are about 30x more sensitive than the RCA design, and this may be why they are so "twitchy" to play.

> Throughout, I was presuming you have access to tubes as specified.
> For much of the circuitry, this is not too demanding (modern twin
> triodes would probably work as well).

I'm not going to duplicate it to that level, I'm just looking to produce
something that plays much like the original, without the large delay in
volume response caused by the filament driven approach that the RCA used.

> Returning to the question of coil construction. There is nothing
> sacred there. I wouldn't worry about Q because one wire diameter
> pitch is not the best (3 is better) so the original designers didn't
> really care either. As for resonance, these circuits are swamped by
> 2200pF, interwinding capacitance hardly enters into the picture. If
> they are resonant, they are series resonant.

I believe they are. The question is wether they were tuned to series
resonance, or off to one (which?) side.

How can i calculate the reactance of a short rod with relatively large
diameter?
The typical antenna is 20-30" and about 3/8" diameter.

The coil, I mostly understand, and I've got a fair bit of mathcad done now,
but I'm not seeing the light as to what the original designs were based on.

> 73's
> Richard Clark, KB7QHC

874. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 17:47:17 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <2fqdndvSRdk5e5rcRVn-hQ@comcast.com>
Source record: 91895

> If you're using a rig with solid-state output without a tuner you may have
a
> problem. But with a tuner, use it in place of 50-ohm line--you'll still
not know
> the difference.
>
> Walt, W2DU

Some antennas match better to 75 ohms anyway, right?

I was kind of surprised when I discovered the fundamental difference between the two, and why 75 not 50, rules the cable world. For any given diameter of line (read cost per foot) 75 ohm cable is less lossy at high frequencies, than 50 ohm.. 50 carries more power than 75, because it keeps the voltages lower.

So it would seem that us VHF/UHF/Microwave guys should really be using 75 ohm cable!

875. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 18:20:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gfrkfrocvjg3f@corp.supernews.com>
Source record: 91896

Those are some good points, Wes.

Wes Stewart wrote:

>
> I did put together a simple model and pretty much satisfied myself
> that it can be done by modeling, although, I've got better things to
> do right now.
>
> The model can be a simple horizontal free-space dipole with an
> additional wire normal to the dipole connected to one side of the
> feedpoint. (I believe this is your idea) A short (one-segment) wire
> contains the source, a pair of wires comprise the dipole and a fourth,
> variable length wire represents the "coax".
>
> Loads can be placed on the "coax" of various impedances and positions.
> Looking at the vertical E field response gives a measure of the
> suppression of radiation from the "coax". Of course in this case it
> appears that having the load at the feedpoint is optimum as expected.
>
> While I didn't explore it further, I believe that if the "coax" angle
> with respect to the dipole is changed to other than 90 degrees, and
> the length is fiddled with, coupling will result and then other load
> positions might be more effective in suppressing unwanted radiation.
>
Yes, that's correct.

There's a fundamental problem with determining feedline outer current with modeling. Whether conducted or due to coupling, the amount of current and its distribution depends on the length and orientation of the path along the outside of the feedline to the Earth. That means that the path not only to the rig, but from the rig to the Earth via its "ground" connection has to be modeled. While this might sometimes be simple, in many cases it's not. What you can productively do with modeling is to observe the effect in some general and theoretical cases, and see the effect of baluns at various points.

> |
> |I don't know of any work that's been done on comparing various balun
> |distribution schemes, and the results would be interesting. It does seem
> |to me, though, that you wouldn't want to space moderately resistive
> |beads along a line, since this could result in significant loss. From
> |that standpoint, it would be best to have localized regions of high
> |resistance.
>

> This is confusing to me. Isn't "loss" what we're after with a balun?
> And if suppression of effects of coupling to the line is the goal over
> considerable bandwidth then I suggest that distributed loss might be
> the way to go. Thus my slightly tongue-in-cheek comment about loading
> the whole length of coax with ferrite.

I believe you come from a test equipment environment, where "loss" can mean something other than power dissipation. For example, the "loss" of signal through a lossless RC filter, which is due to the combination of a fixed source impedance and filter impedance mismatch ("mismatch loss"). That IS the kind of "loss" we're trying to achieve with a balun. But dissipative loss, which is what I meant, isn't what we want.

In the following, "loss" will mean dissipative loss -- the actual loss of power in the form of heat.

A balun that's purely reactive (an air-wound coax coil is a good approximation) has very little loss in any case. But many effective baluns -- those using some types of ferrite cores -- are primarily resistive. The power loss in such a balun is simply I^2*R, where R is the balun resistance and I is the feedline outer current at the point of the balun. If the balun resistance is low, I^2*R will be small because R is small. If the balun resistance is high, I^2*R will be small because I is small. But there's an intermediate value of R for which I^2*R might be substantial. It's really an impedance matching problem -- the balun dissipation is greatest when the balun R "matches" the impedance driving the current. That's the approximate value you want to avoid. What I was alluding to is a balun that's distributed in such a way that the current at the position of a resistive core is significant, resulting in substantial I^2*R loss at the core. It's important to have enough R to reduce the current, hence the dissipative loss, to a low value.

Roy Lewallen, W7EL

876. Re: Water in traps on a 4BTV vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 20:38:19 UTC
From: whru@msn.com
Message-ID: <e52bdeaf.0407281238.3f5b21b9@posting.google.com>
Source record: 91897

> Has anyone had a problem with water accumulating in the traps on a vertical
> antenna? Seems like my Hustler 4BTV has SWR problems after heavy rain
> .... then clears up after a few dry days.

I had the same problem with my 4btv. It turned out to be a cracked
plastic cap/seal that seals the top of the traps to the mast. I
ordered directly from the factory it was very reasonable. Before
assembling the trap I cleaned all the minor corrosion inside the trap.
73
wb6iiq

877. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 21:38:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6t3gg01s6jrpq9l8jtp9t1dj3jbifdm776@4ax.com>
Source record: 91898

On Wed, 28 Jul 2004 12:31:27 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:
>> Reading about the Volume Circuit and viewing its design, we also see a
>> symmetry here too. However, the discussion of T3 and T9 "resonances"
>> are something of stretch (having nothing to do with oscillation), but
>> useful as a metaphor. The function of either of these circuits is to
>> aid in the hand's capacitance in "pulling" loads.
>
>The volume on these units, works by sweeping the osc across a bandpass
>filter, converting FM to AM, and then taking that rectified energy and
>lighting the filament with it.
>I won't use that approach, NS makes a fine VCA chip.

Hi Dave,

I don't know where you got this theory of FM in the context of the
Theramin, it certainly isn't offered in the material as far as I can
tell. If it is, it is quite wrong. For one, there is no bandpass
filter anywhere. Second, the Volume Oscillator is used simply to pump
power into the heater of V5 efficiently. It is a DC-RF-Heater
conversion where the hand capacitance pulls the load to rob the
conversion process. V5 is simply a variable resistor plate load to V4
in a cascode design. V5 is a current limiter with R12 as a parallel,
very current limited plate voltage source tapped at 40% of B+. By
passing the hand nearby, the RF level is varied, causing the heater
voltage to follow and the tube conduction likewise. The circuit
frequency is selected only for conversion efficiency and at C13 is
driven to ground. As such the frequency completely disappears from
the theory of operation and has no part in the mixing products.
>
>> As for your question about quadrupling the frequencies involved, I
>> would echo: Why?
>
>I have an existing unit that is designed for this range, and I'm trying to
>translate the design up.

Which range? The quadrupled one? If it is already designed for it,
what is there to translate? If it is not currently the quadrupled
one, why are you translating it?

>There is the mechanism of pulling and
>> plate resistance coupled with these loads and their Z. If you shift
>> the load Z by making smaller inductances (which follows from the
>> reduction of the coil to attend the increase in frequency) you then
>> shift the load line.

>
>I don't follow here. What's the load line?

The hand is robbing the power going to either circuit. Its proximity
is tailored to the plate load. The response of the circuit with
respect to the hand position creates what is called a "load line"
(consult tube amplifier design theory) that presumes the tube has a
given characteristic Z. Basically, this is ratiometrics and as the
hand, historically, has not changed Z then any change of the tube
characteristic Z (using the wrong tube in the same circuit) leads to a
different ratio whose effects may be pleasant, or intolerable.
>
>> This could make for a very difficult to control
>> Theremin where the hand movements are too very close, or are forced to
>> be much closer (depending upon the new dynamics introduced) compared
>> to former operation.
>
>We'd like them to be linear, aka one octave is the same size as another.

Then you need to know the ratiometrics.

>> Same thing goes if you choose to reduce the
>> capacitances of the frequency determining capacitors in the
>> oscillators; then the hand capacitance becomes more significant and
>> range changes become greater (the Theremin is more sensitive).
>
>Right. Recent designs are about 30x more sensitive than the RCA design, and
>this may be why they are so "twitchy" to play.

Suggests that the ratio has gone ballistic - not a particularly
beneficial return. Would you try to tune a Cello like a Violin? Who
would want to play it?

>> Throughout, I was presuming you have access to tubes as specified.
>> For much of the circuitry, this is not too demanding (modern twin
>> triodes would probably work as well).
>
>I'm not going to duplicate it to that level, I'm just looking to produce
>something that plays much like the original, without the large delay in
>volume response caused by the filament driven approach that the RCA used.

Rectify the Volume Oscillator at the output of T3 and use it to
regulate a pass FET in cascode with the audio amplifier. Reference
the rectified signal to B+ not ground and observe polarity to perform
the same transconductance of the original circuit.

>> Returning to the question of coil construction. There is nothing
>> sacred there. I wouldn't worry about Q because one wire diameter
>> pitch is not the best (3 is better) so the original designers didn't
>> really care either. As for resonance, these circuits are swamped by
>> 2200pF, interwinding capacitance hardly enters into the picture. If
>> they are resonant, they are series resonant.

>
>I believe they are. The question is wether they were tuned to series
>resonance, or off to one (which?) side.

That is not critical. You should notice that the original didn't care
to offer tuning here, not in the conventional sense of alignment. The
controls are oscillator frequency tuning to maintain the "beat" not
resonance. I would speculate that the "Volume" control, C10 offers
some clue to the ratio of hand capacitance.

These antenna circuits may still be resonant, but to which side is
immaterial as the slope is the same.

>How can i calculate the reactance of a short rod with relatively large
>diameter?
>The typical antenna is 20-30" and about 3/8" diameter.

There are not large by any stretch of the imagination - not at a
wavelength of 300 or more meters. Their radiation resistance has to
be in the nanoOhms. Reactance is trivial, it is capacitive and based
on simple geometrical formula.

>The coil, I mostly understand, and I've got a fair bit of mathcad done now,
>but I'm not seeing the light as to what the original designs were based on.

That is because you are trying to see it in RF terms when it is no
more complex than a capacitive voltage divider that is used in light
dimmers. It only "looks" like radio, it is more an elaborate audio
buzzer. Going to higher frequencies is more likely to bring you
grief.

73's
Richard Clark, KB7QHC

878. mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 21:44:03 UTC
From: rjhall <mordac2@yahoo.com>
Message-ID: <MPG.1b722e7cf55fcdbe989680@news.verizon.net>
Source record: 91899

Greetings,

For 6-Meter work I have a Cushcraft 5-el beam.

I just came into possesion of an MFJ 3-el 6M beam. Not what I would chose if I was doing it on purpose, but since I have it I am wondering:

Is there any advantage (or disadvantage) to stacking these two antennas?

If not, maybe I'll mount the MFJ vertical for occasional FM work.

73

Bob, KC2MHU

879. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 22:11:38 UTC
From: jgboyles@aol.com
Message-ID: <20040728181138.19398.00002004@mb-m17.aol.com>
Source record: 91900

>For 6-Meter work I have a Cushcraft 5-el beam. I just came into possesion of an MFJ 3-el 6M beam.

>Is there any advantage (or disadvantage) to stacking these two antennas?

If you stack two identical beams, if memory serves me correctly, the maximum gain you could expect is 3 db over the single beam, and as I remember, stacking is to increase forward gain. Since you are stacking two different beams, the spacing, positioning, and feed would be critical in maximizing the gain. In my opinion, the difficulity in stacking two different beams versus the benefit gained would not make it worth the effort. It's possible that you could wind up with less forward gain than with a single beam, if you are not careful.
73 Gary N4AST

880. Re: Screwdriver antennas--Opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 22:53:59 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cebvm2$uv9$3@news7.svr.pol.co.uk>
Source record: 91858

Jerry

This link does not work, please can you re-post it.

Jon

"Jerry" <joxendi@bellsouth.net> wrote in message
news:62jNc.21114$%S4.348@bignews1.bellsouth.net...
>
> "Da Shadow" <DAS@cat.net> wrote in message
> news:q88Nc.390$wz.205@fed1read01...
> >
> > Yo Shadow 998 -- Da Shadow here
> > Have you looked at eHam reviews -- lots of opinions and mobile antennas
> > there
> > http://www.eham.net/reviews/products/12
> > --
> > Lamont Cranston
> >
> > The Shadow Knows
> > ----------
> > "Shadow 998" <hrd998cc@nospam.yahoo.com> wrote in message
> > news:aY6Nc.2664$AY5.1601@newssvr21.news.prodigy.com...
> > > I am very close to testing for my general ticket thanks to Gordon
West's
> > > morse cassettes. I want to get an HF screwdriver antenna for my
mobile
> in
> > > anticipation of adding /AG to my call and am looking for
> > > opinions/suggestions on manufacturers. What are the pros and cons?
Do
> > you
> > > have a favorite? Best place to buy?
> > >
> > > Thanks for the input.
> > >
> > > Russ KG6TDX
>
> While you are at it, please take a look at www.qrz.com.k4kwh . It is a
> product at a reasonable price and will serve you well.
>
> 73
>
> Jerry
> > >

> > >
> >
> >
>
>

881. Re: If it's a loop, it's directional, right?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 23:16:00 UTC
From: W4WNT <w4wnt@carolina.rr.com>
Message-ID: <QsWNc.221393$2o2.11297349@twister.southeast.rr.com>
Source record: 91901

Horizontal loops are omnis. Look at the Par Loops for VHF/UHF.

Bill, W4WNT

"wolfee" <clambrain@com.invalid> wrote in message
news:dgZMc.325728$Gx4.118879@bgtnsc04-news.ops.worldnet.att.net...
> The Terk "Advantage" AM antenna says it is "omnidirectional". But, the
> shape of the thing is a loop. Doesn't that mean it must have some
> directional characteristics?
>
>

882. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 23:16:31 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <489gg0temnnc2sl7hflgrfhedsqug640mg@4ax.com>
Source record: 91902

On Wed, 28 Jul 2004 11:20:58 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

|Those are some good points, Wes.
|
|Wes Stewart wrote:
|
|>
|> I did put together a simple model and pretty much satisfied myself
|> that it can be done by modeling, although, I've got better things to
|> do right now.
|>
|> The model can be a simple horizontal free-space dipole with an
|> additional wire normal to the dipole connected to one side of the
|> feedpoint. (I believe this is your idea) A short (one-segment) wire
|> contains the source, a pair of wires comprise the dipole and a fourth,
|> variable length wire represents the "coax".
|>
|> Loads can be placed on the "coax" of various impedances and positions.
|> Looking at the vertical E field response gives a measure of the
|> suppression of radiation from the "coax". Of course in this case it
|> appears that having the load at the feedpoint is optimum as expected.
|>
|> While I didn't explore it further, I believe that if the "coax" angle
|> with respect to the dipole is changed to other than 90 degrees, and
|> the length is fiddled with, coupling will result and then other load
|> positions might be more effective in suppressing unwanted radiation.
|>
|Yes, that's correct.
|
|There's a fundamental problem with determining feedline outer current
|with modeling. Whether conducted or due to coupling, the amount of
|current and its distribution depends on the length and orientation of
|the path along the outside of the feedline to the Earth. That means that
|the path not only to the rig, but from the rig to the Earth via its
|"ground" connection has to be modeled. While this might sometimes be
|simple, in many cases it's not. What you can productively do with
|modeling is to observe the effect in some general and theoretical cases,
|and see the effect of baluns at various points.

Yes but... if we are concerned with induced current, then distance is
our friend.
|
|> |
|> |I don't know of any work that's been done on comparing various balun

|> |distribution schemes, and the results would be interesting. It does seem
|> |to me, though, that you wouldn't want to space moderately resistive
|> |beads along a line, since this could result in significant loss. From
|> |that standpoint, it would be best to have localized regions of high
|> |resistance.
|>
|> This is confusing to me. Isn't "loss" what we're after with a balun?
|> And if suppression of effects of coupling to the line is the goal over
|> considerable bandwidth then I suggest that distributed loss might be
|> the way to go. Thus my slightly tongue-in-cheek comment about loading
|> the whole length of coax with ferrite.
|
|I believe you come from a test equipment environment, where "loss" can
|mean something other than power dissipation. For example, the "loss" of
|signal through a lossless RC filter, which is due to the combination of
|a fixed source impedance and filter impedance mismatch ("mismatch
|loss"). That IS the kind of "loss" we're trying to achieve with a balun.
|But dissipative loss, which is what I meant, isn't what we want.

Let me give you a real world example, not from my test equipment environment but from a design environment.

The transmitter in the late version of the Phoenix Missile used as its final "amplifier" (really an injection-locked oscillator) a cavity with sixteen coupled Impatt diodes. This is difficult to describe in words, but I'll try

Each diode presented about -2 ohm, which was transformed up (or down, depending on semantics) to some "higher" value of negative resistance via some very low impedance quarter-wave coaxial lines. Each of these lines then became smaller diameter pins that exited one face of a radial cavity and passed through the cavity near the outside wall, thus coupling energy into and out of the cavity. On the opposite face of the cavity, the pins became an air dielectric coaxial line as they passed through another set of bores. Operating bias was supplied to the pins on the output side of these bores.

To "seal" the face of the second cavity wall we wanted to present a high impedance at the cavity end of each of the 16 bores. A low frequency equivalent would be the plate choke in an h-f amplifier and to prevent any energy from dribbling out to the power supply, we needed an equivalent of the B+ bypass capacitor.

The operating bias was supplied by 16 pulsed current sources at a classified frequency, but suffice it to say that we didn't want any bypass capacitors on the ends of these pins, not that they would have been effective at 10 GHz anyway.

The solution was to add some *dissipative* Eccosorb "dielectric" to these lines at an odd multiple of one quarter wavelength from the face of the cavity. The *magic* impedance inverting property of quarter wave lines was used to transform this low dissipative impedance to a

much higher, almost dissipationless impedance at the cavity.
I submit that the same thing can happen when using dissipative baluns.

Clearly, as you state above, we don't have much of a clue as to the surge impedance of the outside of the coax or its effective length so computation can be difficult. But intermediate values of balun resistance aren't necessarily bad if they are located at a position that minimizes I.

For broadband applications there is probably some optimum way of populating the line with ferrite, but this is likely an intractable problem, best solved by making the whole length of the line ferrite, which is where I came in. [g]

Wes

|
|In the following, "loss" will mean dissipative loss -- the actual loss
|of power in the form of heat.
|
|A balun that's purely reactive (an air-wound coax coil is a good
|approximation) has very little loss in any case. But many effective
|baluns -- those using some types of ferrite cores -- are primarily
|resistive. The power loss in such a balun is simply I^2*R, where R is
|the balun resistance and I is the feedline outer current at the point of
|the balun. If the balun resistance is low, I^2*R will be small because R
|is small. If the balun resistance is high, I^2*R will be small because I
|is small. But there's an intermediate value of R for which I^2*R might
|be substantial. It's really an impedance matching problem -- the balun
|dissipation is greatest when the balun R "matches" the impedance driving
|the current. That's the approximate value you want to avoid. What I was
|alluding to is a balun that's distributed in such a way that the current
|at the position of a resistive core is significant, resulting in
|substantial I^2*R loss at the core. It's important to have enough R to
|reduce the current, hence the dissipative loss, to a low value.
|
|Roy Lewallen, W7EL

883. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 23:39:10 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <YL6dncQUZZOGpJXcRVn-tA@comcast.com>
Source record: 91903

"Richard Clark" <kb7qhc@comcast.net> wrote in message
> Hi Dave,
>
> I don't know where you got this theory of FM in the context of the
> Theramin, it certainly isn't offered in the material as far as I can
> tell. If it is, it is quite wrong.

In later versions, it's done that way. The volume osc is FMed by the hand
(or swept, pick your definition) and the output run through a filter. So, as
you sweep the osc, it's amplitude varies.
Another approach is to use a second ref osc, and mixer, and use that beat
product..

> For one, there is no bandpass
> filter anywhere. Second, the Volume Oscillator is used simply to pump
> power into the heater of V5 efficiently. It is a DC-RF-Heater
> conversion where the hand capacitance pulls the load to rob the
> conversion process. V5 is simply a variable resistor plate load to V4
> in a cascode design. V5 is a current limiter with R12 as a parallel,
> very current limited plate voltage source tapped at 40% of B+. By
> passing the hand nearby, the RF level is varied, causing the heater
> voltage to follow and the tube conduction likewise. The circuit
> frequency is selected only for conversion efficiency and at C13 is
> driven to ground. As such the frequency completely disappears from
> the theory of operation and has no part in the mixing products.

Right, we only care about the amplitude.

> Which range? The quadrupled one? If it is already designed for it,
> what is there to translate? If it is not currently the quadrupled
> one, why are you translating it?

The one I have is set up to operate at 750-800 kHz.
However, they didn't design in these antenna loading coils.
It is also extremely twitchy to play.
Another fellow measured the sensitivity of this one, and a couple others,
and the RCA design.
The RCA was roughly 30x less pitch change per pF.

> The hand is robbing the power going to either circuit. Its proximity
> is tailored to the plate load. The response of the circuit with
> respect to the hand position creates what is called a "load line"
> (consult tube amplifier design theory) that presumes the tube has a
> given characteristic Z. Basically, this is ratiometrics and as the
> hand, historically, has not changed Z then any change of the tube
> characteristic Z (using the wrong tube in the same circuit) leads to a

> different ratio whose effects may be pleasant, or intolerable.

Ok, I think I understand. The oscillator is "weak", and the hand proximity moves it twoard extinction. This makes sense, the Lev Theremin and the RCA designs are maximum volume with the hand removed, and go to minimum in proximity. It also makes musical sense, as I need to be able to get the note terminated quickly to play real music, as opposed to wierd sound effects.

> >We'd like them to be linear, aka one octave is the same size as another.
>
> Then you need to know the ratiometrics.

That may be what I'm trying to uncover, but the pitch and volume controls are very different.
The pitch is far more important to be accurate.

> Suggests that the ratio has gone ballistic - not a particularly
> beneficial return. Would you try to tune a Cello like a Violin? Who
> would want to play it?

Good question.
If you listen to recordings of Clara Rockmore, the sound is much more controlled, and precise.
I suspect that something has been lost in the design of the antenna coils, and how they interact with the player. Also, I think that the sensitivity overall has suffered from a "more is better" approach, which shrinks what Clara called the "space control field", that area around the instrument that must not be infringed on while playing. This by itself isn't a bad thing, but it appears to come at a large cost in playability.. Like adapting a Cello for a marching band. :)

> Rectify the Volume Oscillator at the output of T3 and use it to
> regulate a pass FET in cascode with the audio amplifier. Reference
> the rectified signal to B+ not ground and observe polarity to perform
> the same transconductance of the original circuit.

RCA did it with filament heat, which introduces a significant delay, and overall slow response.
Moog does it with the bandpass and rectification, and an LM13600 VCA.
PAIA does it with another pair of oscillators, and does a crude F-V conversion on that mix product. I'm not sure which is really the better approach.
Interestingly, the PAIA approach may be closer to the Lev Theremin and RCA designs.

> That is not critical. You should notice that the original didn't care
> to offer tuning here, not in the conventional sense of alignment. The
> controls are oscillator frequency tuning to maintain the "beat" not
> resonance. I would speculate that the "Volume" control, C10 offers
> some clue to the ratio of hand capacitance.

Don't mix the two circuits. The pitch is much harder to control, and much more critical.
See further down also

> These antenna circuits may still be resonant, but to which side is
> immaterial as the slope is the same.

I suspect it is important. There is some information that isn't in the manual.
Bob Moog worked on Clara Rockmore's theremin (an original Lev Theremin box), and there was some adjustment made to the operating frequency, to get it playing "right". I think the coil is designed to some frequency point, and the control oscillator made to run at, below, or above that point, to get the tuning slope to work out as best it can, then the reference oscillator is tuned to set the base pitch. It seems reasonable that the behaviour would be different if the control osc is set for those three points, against the same hand motion.

> >How can i calculate the reactance of a short rod with relatively large
> >diameter?
> >The typical antenna is 20-30" and about 3/8" diameter.
>
> There are not large by any stretch of the imagination - not at a
> wavelength of 300 or more meters.

I get that, it's about the size of my 2 meter vertical, other than the rather large diameter.
I meant large, in that Theremin could have easily used something thinner, yet he didn't.
There was likely a reason. Wether it was mechanical rigidity (likely) or cost of materials, or that was the easiest size to get, I don't know. But, I expect the diameter of the rod to have a significant effect on it's capacitance, and how well it couples to the player.
I also see that there is never a picture of a Lev Theremin designed box, with a pitch antenna of any other shape, like a flat plate.. Important, I don't know..

> Their radiation resistance has to be in the nanoOhms.

Way worse than DXing on 160 :)

> Reactance is trivial, it is capacitive and based on simple geometrical
> formula.

Which is the part I'm looking for.

> >The coil, I mostly understand, and I've got a fair bit of mathcad done
> now,
> >but I'm not seeing the light as to what the original designs were based
> on.
>
> That is because you are trying to see it in RF terms when it is no
> more complex than a capacitive voltage divider that is used in light
> dimmers. It only "looks" like radio, it is more an elaborate audio

> buzzer. Going to higher frequencies is more likely to bring you
> grief.

The volume and pitch are more or less separate entities. I'm not much concerned with linearity of the volume control. You're far more likely to notice 5% errors in pitch, than in expression.
On the pitch side, you just have two oscillators, mixed in a diode ring (modern design)

What I think may be going on here, is that the ideal antenna coil design moves you to a region where each inch of motion of the hand is more or less linear in pitch.

IOW, if the first foot is an octave, then ideally the second foot would also be an octave.
This would obviously break down when you get very close to the antenna, as touching it would be a huge jump, but that's the goal..

The difficulties are part of the exploration. Trying to apply it at a different frequency is likely to uncover the bits that are important and working, because they scale, and to introduce other issues, which may just get in the way.

Unfortunately, Theremin didn't leave behind much in the way of notes, so we don't know WHY he did certain things, only what was done.

884. Re: If it's a loop, it's directional, right?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 23:46:34 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <IYCdnWEZnMILp5XcRVn-hw@comcast.com>
Source record: 91904

"W4WNT" <w4wnt@carolina.rr.com> wrote in message
news:QsWNc.221393$2o2.11297349@twister.southeast.rr.com...
> Horizontal loops are omnis. Look at the Par Loops for VHF/UHF.
>
> Bill, W4WNT
>
> "wolfee" <clambrain@com.invalid> wrote in message
> news:dgZMc.325728$Gx4.118879@bgtnsc04-news.ops.worldnet.att.net...
> > The Terk "Advantage" AM antenna says it is "omnidirectional". But, the
> > shape of the thing is a loop. Doesn't that mean it must have some
> > directional characteristics?

The terk is a vertical loop, with two nulls, and a fairly broad response.
They did not speak accurately.
It would have to be something like a vertical colinear antenna, to be
vertically polarized, omnidirectional, and have gain.. I'm not sure how
important polarization is at 1 MHz, over moderate distances. I don't work
down that way much.

885. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-28 23:59:50 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <W5XNc.99423$OM3.29311@newssvr29.news.prodigy.com>
Source record: 91905

However, there could be an advantage-- by COMBINEING them! But this
takes some real estate to accomplish or towers! for example have
friend , has old modified Wilson for 6 meters , in a tree at around
90-110 feet, fed with hardline. he also has a 10 El m squared at around
40 foot, on a tower. During band openings, he hears better with the
tree mounted ant, other times , better with the M squared. Tho, dont
think he ever combined them (Tee fitting, and adjusted phaseing), it is
possible to max for shifting signals! in microwave (corse, there they
use 2 recievers)! it is called Space Diversity! at , say 2 GHz, path of
a far end station may move up to couple hundred feet-- for Es, and
tropo, the same effect may occur, shifting max to min (or vice versa) by
300 feet, or more! Would be really interesting to see a paper on this
at VHF (read 6, 2, and 432)! Jim NN7K

JGBOYLES wrote:
>>For 6-Meter work I have a Cushcraft 5-el beam. I just came into possesion of
>
> an MFJ 3-el 6M beam.
>
>
>>Is there any advantage (or disadvantage) to stacking these two antennas?
>
>
> If you stack two identical beams, if memory serves me correctly, the maximum
> gain you could expect is 3 db over the single beam, and as I remember, stacking
> is to increase forward gain. Since you are stacking two different beams, the
> spacing, positioning, and feed would be critical in maximizing the gain. In my
> opinion, the difficulity in stacking two different beams versus the benefit
> gained would not make it worth the effort. It's possible that you could wind
> up with less forward gain than with a single beam, if you are not careful.
> 73 Gary N4AST

886. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 00:25:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r4fgg0pdktpknpcsdpiu344fqvgad7bg81@4ax.com>
Source record: 91906

On Wed, 28 Jul 2004 18:39:10 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>> These antenna circuits may still be resonant, but to which side is
>> immaterial as the slope is the same.
>
>I suspect it is important. There is some information that isn't in the
>manual.

Hi Dave,

Couldn't be important, the slope is the same to either side. And if
it was at the peak you would lose half your range of motion.

You might want to think of the Q of the situation. For your recent
re-inventions with 30x the characteristic, it would seem an engineer
stepped up to the Stradivarius and "optimized it" (better Q?).

>Bob Moog worked on Clara Rockmore's theremin (an original Lev Theremin box),
>and there was some adjustment made to the operating frequency, to get it
>playing "right". I think the coil is designed to some frequency point, and
>the control oscillator made to run at, below, or above that point, to get
>the tuning slope to work out as best it can, then the reference oscillator
>is tuned to set the base pitch. It seems reasonable that the behaviour
>would be different if the control osc is set for those three points,
>against the same hand motion.

This seems to be theory paving its own road in front of itself. It
sounds good, looks like performance correlated to hand waving (in the
musical sense), but is unrelated to what is going on.
>
>> >How can i calculate the reactance of a short rod with relatively large
>> >diameter?
>> >The typical antenna is 20-30" and about 3/8" diameter.
>>
>> There are not large by any stretch of the imagination - not at a
>> wavelength of 300 or more meters.
>
>I get that, it's about the size of my 2 meter vertical, other than the
>rather large diameter.
>I meant large, in that Theremin could have easily used something thinner,
>yet he didn't.
>There was likely a reason. Wether it was mechanical rigidity (likely) or
>cost of materials, or that was the easiest size to get, I don't know.

The design is first and foremost for the benefit of the performer, not
for the technical resonance.

>But, I expect the diameter of the rod to have a significant effect on it's
>capacitance, and how well it couples to the player.

More than likely, it goes to the surface area of half a plate
capacitor.

>I also see that there is never a picture of a Lev Theremin designed box,
>with a pitch antenna of any other shape, like a flat plate.. Important, I
>don't know..

Your speculations below may be prescient.

>> Reactance is trivial, it is capacitive and based on simple geometrical
>formula.
>
>Which is the part I'm looking for.

Simple, compute the surface area of the smallest plate,
divide by the distance between plates;
multiply by 0.225 (for dimensions in inches).
you get picofarads. Let's speculate:

One hand = 24 square inches
One rod = 24 square inches (how convenient)
distance between them = 12 inches
or about ï¿½ pf -whew!-

Actually it would be less than that because the plate of the rod is
elongated. If we bring the hand closer to the rod, say, within an
inch; then the capacitance rises about 10 fold. But again, probably
less because of the distribution of the rod's area.

Anyway, working numbers of .5 to 5 pF. You may note that almost every
capacitor in the box is easily 20 to 2000 times this and swamps it
out. So it may be reasonable to presume that the slope of a curve is
being used to leverage the small reactive change.

>What I think may be going on here, is that the ideal antenna coil design
>moves you to a region where each inch of motion of the hand is more or less
>linear in pitch.

Well, given the shape of the rod, that is arguably false. But we can
proceed with the suspect numbers above as if it were true.

>IOW, if the first foot is an octave, then ideally the second foot would also
>be an octave.
>This would obviously break down when you get very close to the antenna, as
>touching it would be a huge jump, but that's the goal..

There is no reason for this to fail, unless we revert to the reality
of the capacitive distribution of the rod vs. the hand. Anyway the
speculation of octaves does not "ring" true to my recollection of

hearing the Theremin, which to me encompassed more than a single
octave.

>The difficulties are part of the exploration. Trying to apply it at a
>different frequency is likely to uncover the bits that are important and
>working, because they scale, and to introduce other issues, which may just
>get in the way.

Try by deliberately spoiling Q for the "hot" modern versions that are
hard to tame. This may be the Q of the coils (unlikely) or the
feedback systems of the oscillator controls which have been
"engineered" instead of crafted.

>Unfortunately, Theremin didn't leave behind much in the way of notes, so we
>don't know WHY he did certain things, only what was done.

There is no reason to believe he understood it either. After all the
guy that invented the Moog decided being a he wasn't what she wanted.

73's
Richard Clark, KB7QHC

887. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 00:44:59 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <Nv6dnWHwYbYa1ZXcRVn-pQ@comcast.com>
Source record: 91907

"Richard Clark" <kb7qhc@comcast.net> wrote in message

> Couldn't be important, the slope is the same to either side. And if
> it was at the peak you would lose half your range of motion.

That part I see, about the peak.
But if the coil SRF is below or above the oscillator's operating point, then it seems to me that the degree of pull for a given change in hand capacitance should be different.

> You might want to think of the Q of the situation. For your recent
> re-inventions with 30x the characteristic, it would seem an engineer
> stepped up to the Stradivarius and "optimized it" (better Q?).

Fixed like a cat, I suspect.. Once fixed, it will never work again :)

> This seems to be theory paving its own road in front of itself. It
> sounds good, looks like performance correlated to hand waving (in the
> musical sense), but is unrelated to what is going on.

That may be, Theremin didn't have much in the way of test equipment, and radio was in it's infancy.

> Simple, compute the surface area of the smallest plate,
> divide by the distance between plates;
> multiply by 0.225 (for dimensions in inches).
> you get picofarads. Let's speculate:
>
> One hand = 24 square inches
> One rod = 24 square inches (how convenient)
> distance between them = 12 inches
> or about pf -whew!-

Sounds plausible,

> Actually it would be less than that because the plate of the rod is
> elongated. If we bring the hand closer to the rod, say, within an
> inch; then the capacitance rises about 10 fold. But again, probably
> less because of the distribution of the rod's area.

So the shape of the rod makes the changes more linear. Makes sense.
The diameter of the rod, then should be as small as possible to achieve the mechanical rigidity needed. All bets for accurate pitch control are off, if the antenna is waving in the breeze.

Possbly a blade or triangular, or even an airfoil shape might be interesting, with the "trailing edge" pointed at the performer. That would

tend to maximize this effect.

> Anyway, working numbers of .5 to 5 pF. You may note that almost every
> capacitor in the box is easily 20 to 2000 times this and swamps it
> out. So it may be reasonable to presume that the slope of a curve is
> being used to leverage the small reactive change.

That's where I'm thinking that the Q and SRF point of the antenna coil comes
into play.
Also in linearizing it, to the degree possible.

> >What I think may be going on here, is that the ideal antenna coil design
> >moves you to a region where each inch of motion of the hand is more or
less
> >linear in pitch.
>
> Well, given the shape of the rod, that is arguably false. But we can
> proceed with the suspect numbers above as if it were true.

I see that the area nearest the hand is obviously more effective than the
area away from the hand.
A bit nasty to model though..

> There is no reason for this to fail, unless we revert to the reality
> of the capacitive distribution of the rod vs. the hand. Anyway the
> speculation of octaves does not "ring" true to my recollection of
> hearing the Theremin, which to me encompassed more than a single
> octave.

Four or five octaves isn't uncommon. The trick is to get it as close to one
octave per (convenient unit of distance) over as wide a range as possible.
If it is nice near the middle and a bit non-linear at the ends, then that
wouldn't be too bad.

> Try by deliberately spoiling Q for the "hot" modern versions that are
> hard to tame. This may be the Q of the coils (unlikely) or the
> feedback systems of the oscillator controls which have been
> "engineered" instead of crafted.

The modern designs all use very small coils, on the order of 40mH, with very
low SRFs.
I suspect they aren't really doing it right. Hard to believe that four
small 10mH coils act like a physically much larger coil. This is why I
suspect Q of the antenna coils is involved somehow.

> >Unfortunately, Theremin didn't leave behind much in the way of notes, so
we
> >don't know WHY he did certain things, only what was done.
>
> There is no reason to believe he understood it either. After all the
> guy that invented the Moog decided being a he wasn't what she wanted.

Bob Moog is still a him, but Wendy Carlos (Of Switched on Bach) isn't.

888. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 01:27:19 UTC
From: Lushy <showbag@alphalink.com.au>
Message-ID: <4108518c@news.alphalink.com.au>
Source record: 91908

Here in Australia we have a multi tapped vertical antenna I think it is
called a Bush Bandit, you can also order specific freqs as well.
VK3HDL
Rye Victoria Australia
"W4UDX" <w4udx@bellsouth.net> wrote in message
news:3DxNc.22716$QO.21230@bignews5.bellsouth.net...
> I don't think such an antenna exists. Mobile HF antennas are physically
> shortened, with loading coils or resonators, and by nature have a narrow
> bandwidth. To cover the frequencies you mentioned, some tuning is going to
> be required for greater bandwidth.... either an antenna tuner at the rig,
> near the antenna, or built-in to the antenna (such as the "screwdriver"
> types). You could use the economical Hustler mobile antenna system with
the
> multi resonator adapter, which allows for up to 4 bands to be use (I
think),
> but even then, each resonator is going to have only a certain bandwidth,
and
> to go from the CW portion of the band to the SSB portion may require
> adjusting the tip on the end of the resonator. Not to mention the whole
> thing would be seriously gawdy looking. Icom and Yeasu both make remote
> tunable mobile antennas, but like the screw-driver types, they can be
> pricey. I would home brew an "Outbacker" type of antenna and just change
the
> fly lead connection when you want to change bands.... There are websites
> that show how to build them using various materials.
>
> 73
> Mark W4UDX
>
>
> "paul" <paul_welch@webtv.net> wrote in message
> news:6201-410623AB-511@storefull-3337.bay.webtv.net...
> > best moble antenna for a yaesu 707 ham rig
> > that wil giv a 1.1 swr at
> > 10 mhz to 30 mhz ..can you help
> >
>
>

889. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 01:40:00 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <MzYNc.344$_e3.246@bignews2.bellsouth.net>
Source record: 91909

```
:-)
Digital AM - yep its the next thing after they create the analog
binary code.
- but technically - cw is almost there ...-.-

"Dr. Daffodil Swain" <wa4jm@earthlink.net> wrote in message
news:GwLNc.16773$iK.11611@newsread2.news.atl.earthlink.net...
>
>
>
> > > I just bought a Terk Advantage antenna. It really does help my cheap
> > little
> > > table top radio get stations a lot farther away. Will I still be able
> to
> > > use it when digital AM radio arrives?
> > >
> > >I wouldn't hold your breath waiting for digital AM
> >
> >
> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
> >
> >
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>

---
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
```

890. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 01:44:28 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <YDYNc.345$_e3.49@bignews2.bellsouth.net>
Source record: 91910

I say - go ahead and try it.. what could be the harm?
You'll have fun with the impedence matching and coax length between the
beams
That's what we're all about - experiment - try it - have fun

"rjhall" <mordac2@yahoo.com> wrote in message
news:MPG.1b722e7cf55fcdbe989680@news.verizon.net...
>
> Greetings,
>
> For 6-Meter work I have a Cushcraft 5-el beam.
>
> I just came into possesion of an MFJ 3-el 6M beam. Not what I would
> chose if I was doing it on purpose, but since I have it I am wondering:
>
> Is there any advantage (or disadvantage) to stacking these two antennas?
>
> If not, maybe I'll mount the MFJ vertical for occasional FM work.
>
> 73
>
> Bob, KC2MHU

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Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004

891. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 02:31:15 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41086174$0$2625$39cecf19@news.twtelecom.net>
Source record: 91911

Richard Clark wrote:
> Hi Dave,
>
> I guess I will bite here.
>

<snip a bit>

> Throughout, I was presuming you have access to tubes as specified.
> For much of the circuitry, this is not too demanding (modern twin
> triodes would probably work as well). However, when we get to the
> Volume control circuit, you definitely need power transfer to light up
> the filament of V5 and its transconductance properties are intimately
> tied into the successful operation. This means V6 cannot slouch in
> the power department. The reference and pitch oscillators, and the
> mixer are pretty conventional as is the AF power amp.
>
> Returning to the question of coil construction. There is nothing
> sacred there. I wouldn't worry about Q because one wire diameter
> pitch is not the best (3 is better) so the original designers didn't
> really care either. As for resonance, these circuits are swamped by
> 2200pF, interwinding capacitance hardly enters into the picture. If
> they are resonant, they are series resonant.
>
> 73's
> Richard Clark, KB7QHC

A most interesting and informative page, and agreed on the control. I never heard of the filament method of gain control before, very nice. Was this based on prior art, or was it a new idea then?

Which leads to a question, on a Moody Blues album from about 1970, a theramin was used to start a song, which swept from around 30 or 40 hz, by ear counter, to at maybe 17000, which was the top end of what I could hear then and possibly above what a british LP ever could hit then. (See slew rate limiting) Anyone know what type of theramin that was? The sweep was very very smooth, and took almost 30 seconds as I remember, so must have been somewhat easy to control.

tom
K0TAR

892. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 02:42:27 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41086413$0$2630$39cecf19@news.twtelecom.net>
Source record: 91912

Stacking 2 non-matching antennas is probably not going to work. I won't say never, but it will be close to that.

The Cushcraft 5 elements were very poor performers for the length. The antenna is an excellent parts kit, however. You can make a very nice 4 element out of it that has a good pattern and good gain. Or a 5 element if you stetch the boom.

tom
K0TAR

rjhall wrote:

> Greetings,
>
> For 6-Meter work I have a Cushcraft 5-el beam.
>
> I just came into possesion of an MFJ 3-el 6M beam. Not what I would
> chose if I was doing it on purpose, but since I have it I am wondering:
>
> Is there any advantage (or disadvantage) to stacking these two antennas?
>
> If not, maybe I'll mount the MFJ vertical for occasional FM work.
>
> 73
>
> Bob, KC2MHU

893. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 02:42:57 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <kqmgg0tu13ncsei203l9d2ro4fhs8chck5@4ax.com>
Source record: 91913

On Wed, 28 Jul 2004 17:02:15 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

[snip]
|
| Let me begin by identifying myself. I'm an old guy who doesnt know much
|about current electronic technology. I'm just having fun with this project
|of making a home made antenna that isnt expected to perform as well as
|designs that are already available.

Don't be too sure! You are not automatically doomed to failure.
|
| I thought the loss in the dissipative ferrite tubes slipped over the
|coax's outer conductor might absorb some "power", and thereby introduce an
|overall insertion loss.

They indeed may absorb *some* power. Whether this is important or
not is the question.
|
| If I was adequately articulate I'd try to make myself more clear. I have
|a dipole with a coax feeding it and at right angle to it. I considered the
|'one half of the dipole' that connects to the coax center conductor. I
|thought the other half of the dipole is then a V shaped conductor made up of
|the 'other half', and the feed line outer conductor. When the outer
|conductor is covered with high loss ferrites, I thought there would be
|excessive (maybe unnecessary) loss introduced in that V shaped half of the
|radiator.

Look at it this way.

Case 1) For a moment consider that the feedline is not connected to
the antenna (a center-fed dipole). If it is located exactly at the
feedpoint and is 90 degrees to the dipole, then it is equally coupled
to each half of the antenna and there is no induced current in the
wire. You can do anything you want to this right-angle "wire" and
there is no power lost to the system and no effect on the radiation
pattern or feedpoint impedance.

Case 2) The coax is located as before but now connected to the dipole.
I haven't seen Roy mention it in this thread but he wrote an excellent
paper on this: "Baluns: What They Do And How They Do It", The ARRL
Antenna Compendium, Vol 1, pp.157-164. Another valued contributor to
this knowledge base is Walt Maxwell, W2DU of "W2DU Balun" fame; also a
frequent contributor here.

To summarize, when you connect the outer conductor of the coax to the dipole, that half of the dipole is comprised of two parts, the original wire and the new wire (the coax braid). The available current on that side will divide into two currents, with the relative magnitudes inversely proportional to the impedance of each wire.

If you want to keep the current in the coax braid low, you need to make its impedance high. That is the function and purpose of the balun. This impedance can be purely reactive, purely resistive, or more typically, a combination of the two (complex).
Quarter-wavelength sleeves, a coiled length of coax and stub baluns are almost totally reactive, ferrite bead/sleeve baluns depending on the ferrite can be either nearly resistive or complex. Clearly, those that are purely reactive are non-dissipative and those that are partly or totally resistive will dissipate power. To solve this problem, the high impedance (i.e. balun) should be located at the feedpoint.

Case 3) The coax does not exit the dipole at 90 degrees. There will be unbalanced coupling to the two halves of the dipole, thus there will be current induced on the outside of the cable. In this case the radiation pattern of the dipole (or other antenna) is corrupted to some extent. Whether this is a problem is---well---problematic... it depends.

If you are carefully constructing a highly directive antenna (your case) then this messes up your pattern. If it is your 80 meter dipole, then who cares.

In this case you should know that even if the transmission line is balanced, the same effects occur. Also in this case, the optimum position for the balun *might not* be located at the feedpoint. Unfortunately, this is really problematic because the optimum location isn't easily determined. The best bet is to avoid this case when clean patterns are desired.

As an aside, I am often amused when someone will mount a Yagi polarized vertically, even going to far as to place it on a non-conductive mast and then tape the coax to that same mast.
|
| I consider myself a successful since I've been able to get such good
|information from this group, even if I cant get this antenna to work.

Hang in there.

Wes

894. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 02:45:04 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <nfKdnbVsWYY2-ZXc4p2dnA@comcast.com>
Source record: 91914

> A most interesting and informative page, and agreed on the control. I
> never heard of the filament method of gain control before, very nice.
> Was this based on prior art, or was it a new idea then?

AFAIK new art. This started not long after the audion was invented.

> Which leads to a question, on a Moody Blues album from about 1970, a
> theramin was used to start a song, which swept from around 30 or 40 hz,
> by ear counter, to at maybe 17000, which was the top end of what I could
> hear then and possibly above what a british LP ever could hit then.
> (See slew rate limiting) Anyone know what type of theramin that was?
> The sweep was very very smooth, and took almost 30 seconds as I
> remember, so must have been somewhat easy to control.

I don't. I'll ask around.

895. parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 04:49:35 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87zn5j1kps.fsf@jidanni.org>
Source record: 91841

[Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50 ohm cable.] Recalling the way resistors and capacitors can be hooked in series or parallel, say, do parallel cables halve or double the ohms? One center lead to one side of the dipole, the other center lead to the other side of the dipole. The braids hooked together I suppose. Or, both center leads hooked to top side of dipole, both braids hooked to bottom side of dipole. All kind of combos possible. Wait, this is all a waste of cable. OK, never mind.

896. little radios with big antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 04:58:01 UTC
From: Dan Jacobson <jidanni@jidanni.org>
Message-ID: <87y8l31kbq.fsf@jidanni.org>
Source record: 91842

Perhaps little radios and big antennas don't mix for transmission no matter what.

Will Junior fry his Kenwood TH-F7E handi talkie by hooking it to larger 2m Ham antennas?

He can't wait for Christmas. Confident after reading the "make 50 ohm cable from 75 ohm cable?" thread, his eyes turn toward the 75 ohm _family VHF TV antenna_. Will trying to transmit 144 MHz at 5W thru it fry his handi talkie?

897. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 05:02:43 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <Tx%Nc.1360$N%3.347@bignews6.bellsouth.net>
Source record: 91915

sorry to break the news
its AM OR Digital - but not AM digital and not digital AM

"wolfee" <clambrain@com.invalid> wrote in message
news:1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net...
> I thought it was already here. ibiquity lists stations broadcasting and
> manufacturers delivering digital receivers right now.
>
> "RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
> news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
> >
> > > I just bought a Terk Advantage antenna. It really does help my cheap
> > little
> > > table top radio get stations a lot farther away. Will I still be able
> to
> > > use it when digital AM radio arrives?
> > >
> > I will tell you when Digital AM radio arrives !!!
> >
> > Steve
> >
> >
> >
>
>

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898. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 05:56:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <494hg0lrdr74b2ddmjeke5hhrsd2r4i7ik@4ax.com>
Source record: 91916

On Wed, 28 Jul 2004 19:44:59 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>Bob Moog is still a him, but Wendy Carlos (Of Switched on Bach) isn't.

My apologies to Bob for the incorrect allusion....

899. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 06:36:57 UTC
From: j999w@aol.com
Message-ID: <20040729023657.13589.00002396@mb-m12.aol.com>
Source record: 91917

>The Cushcraft 5 elements were very poor performers for the length.

Hmmmm, could be why I'm only at 150 grids and 8 countries since April running 80 watts with my Cushcraft 5 el at 35 ft.

:^]

Put that 3 element at a different height and beg/borrow/steal/make a switch to check signals between the two.

I put up a 6m ground plane ... it stinks 99.9% of the time ... BUT I worked CO2OJ in Cuba on it when I couldn't even hear him on the beam. Worth the effort right there.

Never say never, try it and learn.

GL!

John K9RZZ
Milwaukee En62

900. Super Inverted L antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 08:21:31 UTC
From: Antenna Question <orillia@rogers.com>
Message-ID: <fs2Oc.321818$rCA1.82018@news01.bloor.is.net.cable.rogers.com>
Source record: 91918

Does any one have data for this so-called Super Inverted L antenna? Arnie Coro spoke of it on Dxers Unlimited 07-28-04 If you missed it you can listen here: http://www.piratearchive.com/media/dxersunlimited_07-28-04.m3u

901. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 08:38:07 UTC
From: Graybyrd <me@privacy.net>
Message-ID: <me-523A99.02380729072004@corp-radius.supernews.com>
Source record: 91919

Yeh, and it's so nice to point that out.

Guess that's either "Smartass" or "Ass" but not "Smart" or "Asssmart"

Luv you phukin phlamers and ur lame smarts.

Gray

In article <Tx%Nc.1360$N%3.347@bignews6.bellsouth.net>,
"Hal Rosser" <hmrosser@bellsouth.net> wrote:

> sorry to break the news
> its AM OR Digital - but not AM digital and not digital AM
>
>
> "wolfee" <clambrain@com.invalid> wrote in message
> news:1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net...
> > I thought it was already here. ibiquity lists stations broadcasting and
> > manufacturers delivering digital receivers right now.
> >
> > "RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
> > news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
> > >
> > > > I just bought a Terk Advantage antenna. It really does help my cheap
> > > little
> > > > table top radio get stations a lot farther away. Will I still be able
> > to
> > > > use it when digital AM radio arrives?
> > > >
> > > I will tell you when Digital AM radio arrives !!!
> > >
> > > Steve
> > >
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> > Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
> >
> >

--
Reply to: allen/at/graybyrd/dot/com

902. Earthing systems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 08:47:09 UTC
From: mmufoe2004@yahoo.com
Message-ID: <b770165c.0407290047.7e6e102d@posting.google.com>
Source record: 91920
Cross-posted to: alt.energy.high-voltage,rec.radio.amateur.antenna,rec.boats.cruising

I am Ram , Ph.D. Student

Dear sir/madam,

I am trying to find out the correlation between the time delays in conduction mechanism and the degree of earth resistance.

I am using PSPICE simulation package for the simulation work , any suggestions to give help welcome

Research Title:

INVESTIGATION OF THE TRANSIENT BEHAVIOUR OF EARTHING SYSTEMS SUBJECTED TO HIGH IMPULSE CURRENTS

One of the research objectives is to observe the correlation between the time delays in conduction mechanism and the degree of earth resistance for different soil resistivity, impulse polarity and earth electrode configuration

Time delays can be defined as the time taken to reach the current peak. Generally, the time delay can also be influenced by non-uniform water settling process, drying and heating in soil and of course due to the statistical nature of air breakdown. However, these influences are neglected in determining the correlation between the time delays and earth resistance reduction.
In the previous studies, the time delays in soil due to ionisation and heating have been plotted against current/voltage magnitudes. It was found that the time delays were decreasing with higher currents/voltages. However, the tune delays were also taught to be due to a statistical nature of air breakdown.

If you have any question welcome

I am looking forward to hear from you soon

Thanks in advance

Ram

903. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 10:12:51 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <ulmXEUNj2MCBFAYh@ifwtech.co.uk>
Source record: 91821

J999w wrote:
>
>Put that 3 element at a different height
>
That looks like good advice, because angles of arrival vary a lot between short-skip Es and long-skip DX. It's really handy to have a separate antenna whose peaks and nulls in the vertical pattern will be at different angles from your main antenna.

>and beg/borrow/steal/make a switch to check signals between the two.

Signals on 6 can change very quickly - especially the *real* DX - so it's very important to be able to swap instantly. That means two separate feedlines and having the switch where you can reach it.

Better still would be a switch that gives you all the options: Upper only / Lower only / both In-phase / both Antiphase. There are details in the ARRL Antenna Handbook, and on the web. That option requires two separate feedlines of carefully measured electrical lengths, but it is also the most powerful option.

As others have said, normal in-phase stacking of two different beams is not promising... but you never know, there might be a vital QSO where that combination is best. Likewise, antiphase stacking (switching in an extra electrical half-wave into one feedline) would dramatically shift the peaks and nulls in the vertical pattern, which might be very useful someday.

The "U/L/I/A" setup may seem like a lot of effort compared with a simple changeover switch, but it's what many of the most successful 6m DXers and contesters use.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

904. Re: Active Baluns

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 11:29:16 UTC
From: cadence_user@yahoo.fr
Message-ID: <9c0671e1.0407290329.317bc53e@posting.google.com>
Source record: 91822

Thanks, all of you, for your help!
I've heard that there's another way to associate single-ended
component with differential components. I'll do my best to find it
out, and to keep this thread in touch!

Thanks again!

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:<lysNc.15115$PK5.1284@nwrddc02.gnilink.net>...
> "Stephane Mazurie" <cadence_user@yahoo.fr> wrote in message
> news:9c0671e1.0407262342.57414c53@posting.google.com...
> > Hi, Richard !
> >
> > Well, I'm sorry if I made a mistake but I've found in a thesis,
> > circuits that are for active baluns, using FET:
> > http://www.unilim.fr/theses/2003/sciences/2003limo0028/images/image251.gif
> > a) Long-tail pair b) Common Source-Common Gate c) Three transistors
> > It is true that their use introduce many problems, such as complexity
> > in stability and linearity. Moreover, an active balun is unilateral.
> >
> > Well, my problem is to simulate with a software like Cadence some
> > circuits and to compare results obtained with another software called
> > ADS: ADS stands baluns, but Cadence don't. And I'm trying to find an
> > easy balun circuit, well designed, that would make both results
> > converging...
> >
> > I hope It's a bit more clear :)
> > Thanks in advance
> >
> > Steph
> > > Hi Steph,
> > >
> > > BalUns are passive devices. Any addition of active circuitry will
> > > likely limit their utility rather than enhance them. Perhaps if you
> > > were to describe the purpose or application you seek to accomplish,
> > > then it would aid us.
> > >
> > > 73's
> > > Richard Clark, KB7QHC
>
> Hi Steph,
> Baluns are NOT always passive devices- it is quite common to find active
> baluns in both the space and consumer industry. Winegard antennas used to
> produce a very low noise MATV preamplifier whose input was an active balun-
> thus dispensing with the loss associated with a passive balun.

> I encourage your interest and research.
>
> Dale W4OP

905. Re: Earthing systems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 11:47:59 UTC
From: Brian Whatcott <betwys1@sbcglobal.net>
Message-ID: <m1phg01icm0a9s6q1hblgb77vogmqr5gdm@4ax.com>
Source record: 91823
Cross-posted to: alt.energy.high-voltage,rec.radio.amateur.antenna,rec.boats.cruising

[speculative input]

It seems that channels of higher conductivity in a low conductivity
matrix would lead to longer times to peak I in that there would be
fewer parallel current paths, and consequently, higher effective
inductance in the path.

Brian Whatcott Altus OK

On 29 Jul 2004 01:47:09 -0700, mmufoe2004@yahoo.com
(mmufoe2004@yahoo.com) wrote:

>I am Ram , Ph.D. Student
>
>
>Dear sir/madam,
>
>I am trying to find out the correlation between the time delays in
>conduction mechanism and the degree of earth resistance.
>
>I am using PSPICE simulation package for the simulation work , any
>suggestions to give help welcome
>
>
>
>Research Title:
>
>INVESTIGATION OF THE TRANSIENT BEHAVIOUR OF EARTHING SYSTEMS SUBJECTED TO
>HIGH IMPULSE CURRENTS
>
>
>One of the research objectives is to observe the correlation between the
>time delays in conduction mechanism and the degree of earth resistance for
>different soil resistivity, impulse polarity and earth electrode
>configuration
>
>
>
>Time delays can be defined as the time taken to reach the current peak.
>Generally, the time delay can also be influenced by non-uniform water
>settling process, drying and heating in soil and of course due to the
>statistical nature of air breakdown. However, these influences are
>neglected in determining the correlation between the time delays and earth
>resistance reduction.

>In the previous studies, the time delays in soil due to ionisation and
>heating have been plotted against current/voltage magnitudes. It was found
>that the time delays were decreasing with higher currents/voltages.
>However, the tune delays were also taught to be due to a statistical
>nature of air breakdown.
>
>If you have any question welcome
>
>I am looking forward to hear from you soon
>
>Thanks in advance
>
>Ram

906. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 11:53:38 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4108e542$0$74192$39cecf19@news.twtelecom.net>
Source record: 91824

J999w wrote:

>>The Cushcraft 5 elements were very poor performers for the length.
>
>
> Hmmmm, could be why I'm only at 150 grids and 8 countries since April running
> 80 watts with my Cushcraft 5 el at 35 ft.
>
> :^]
>
> Put that 3 element at a different height and beg/borrow/steal/make a switch to
> check signals between the two.
>
> I put up a 6m ground plane ... it stinks 99.9% of the time ... BUT I worked
> CO2OJ in Cuba on it when I couldn't even hear him on the beam. Worth the effort
> right there.
>
> Never say never, try it and learn.
>
> GL!
>
> John K9RZZ
> Milwaukee En62

John

Note that I didn't say never. I also didn't say the Cushcraft 5 didn't work, just that it wasn't as good as it could have been. And they really are a great parts kit, we have 2 hanging in my buddy's pole barn that gave good service in the early 90's as portable contest antennas. One rebuilt as a 4 element, and one as a stretched 5.

Remember, he didn't say just put the 2 up and switch between them, he said stack them. It will likely be a lot worse than either of the 2 antennas singly. At least model it first, and see what is needed to, at a minimum, get them close to being in phase with each other.

Or do what you said, though the 5 will likely do better, and just put that up as high as possible would be my vote.

Bob - if you'd like a decent rework of the thing as a 4 element, feel free to drop a note to the email address shown here and I'll dig it out of my files.

And yes, sometimes 6 can be amazing. During the late 80's peak I was working an AK station, I think it was KL7NO, and he was about 60 over.

So he went into his basement, fired up his FT690 on the telescoping whip, and work myself in EN34, and another guy in EN35, at well over S9. And was still in his basement when he did it.

tom
K0TAR EN34HX

907. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 11:58:07 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4108e650$0$74192$39cecf19@news.twtelecom.net>
Source record: 91825

Ian White, G3SEK wrote:

> The "U/L/I/A" setup may seem like a lot of effort compared with a simple
> changeover switch, but it's what many of the most successful 6m DXers
> and contesters use.
>

Agreed - at our contest site we use a 4 over 4 stack with a separate 3 element under that. Not as fancy as you suggest, or I'd like, but it really does help in a contest. That and they don't have to point the same direction at the same time. Helps when 2/3/4 is in at the same time as 7's.

tom
K0TAR

908. Re: Earthing systems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 13:27:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ceatvl$oo5$1@titan.btinternet.com>
Source record: 91826
Cross-posted to: alt.energy.high-voltage,rec.radio.amateur.antenna,rec.boats.cruising

Time-related transients in systems of conductors are more accurately analysed by considering the conductors to be transmission lines. Propagation velocity and characteristic impedance are essential features to be approximated. Reflections are also important factors.

Applies equally to lightning conductors.

Now carry on with your thesis.

Reg Edwards.

909. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 15:05:05 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <Dm8Oc.2032$cv5.604@lakeread07>
Source record: 91827

I agree one is right to be "concerned" about carbon and flue gasses however, I would not let that stop me. I have run an antenna over a fireplace flue for years without a problem. Just be sure the antenna is as high as you can get it and hopefully that will be at least 3 or 4 feet above the flue top. Then air and wind will have a chance to disperse the gasses before they get to the antenna in any concentration.

I hate to see people do nothing just because they think there might be some possibility it is not the best way to do it. Put the antenna up and if you have to take it down and clean it in a few years, no big deal.
--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

910. WTB:Traps for A3WS Cushcraft

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 15:36:29 UTC
From: NA1VT <na1vt@adelphia.net>
Message-ID: <9vWdnWk5C4jMhJTcRVn-vw@adelphia.com>
Source record: 91828
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.swap

Anyone have a set of traps from a Cushcraft A3WS that was blown down or ice damaged for sale? Have old TH3 that I want to make a 12&17 meter beam.
Email: na1vt@arrl.net Thanks for looking, John

911. Re: Antenna height vs roof height

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 15:49:53 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <J09Oc.9380$fm2.3819@lakeread02>
Source record: 91829

"Craig Buck" <k4ia@cox.net> wrote
> I agree one is right to be "concerned" about carbon and flue gasses
however,
> I would not let that stop me. I have run an antenna over a fireplace flue
> for years without a problem. Just be sure the antenna is as high as you
can
> get it and hopefully that will be at least 3 or 4 feet above the flue top.
> Then air and wind will have a chance to disperse the gasses before they
get
> to the antenna in any concentration.
>
> I hate to see people do nothing just because they think there might be
some
> possibility it is not the best way to do it. Put the antenna up and if
you
> have to take it down and clean it in a few years, no big deal.
> --
> Radio K4ia
> Craig "Buck"
> Fredericksburg, VA USA
> FISTS 6702 cc 788 Diamond 64

I hear you Craig! I've got a copper-pipe J-pole tuned to 156.800 marine on
my chimney, as you eventually run out of roof space for antennas <G>

It's putting the log periodics or other beams on a chimney, where elements
will likely spend some time right over the flue that would see the real
effects, but as you said, any location is better than in a box on the garage
floor, lol.

73,
Jack Painter
Virginia Beach VA

912. Re: Earthing systems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 16:16:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Bp9Oc.9652$fm2.4429@lakeread02>
Source record: 91830
Cross-posted to: alt.energy.high-voltage,rec.radio.amateur.antenna,rec.boats.cruising

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ceatvl$oo5$1@titan.btinternet.com...
> Time-related transients in systems of conductors are more accurately
> analysed by considering the conductors to be transmission lines.
Propagation
> velocity and characteristic impedance are essential features to be
> approximated. Reflections are also important factors.
>
> Applies equally to lightning conductors.
>
> Now carry on with your thesis.
> ----
> Reg Edwards.

Reg, I think he might be referring to the transfer-times from a conductor to different components of soil. Not the transmission line theory inside a conductor. The reaction speed of ground systems are under a lot of study to help determine the best control of ground potential rise (GPR) where isolation by fiber optic or HV isolation transformers alone is insufficient protection.

Water/wet soil along the soil surface during a strike attachment makes it hard to control GPR when it connects multiple earthing points almost instantaneously. The dry-ground sections of each earthing rod end up making less contribution to the designed voltage division, and increased current from grounding systems up into the interior of buildings is one result. It's an interesting problem creates and conflicts between design approaches for lightning protection. What works for direct attachment will not work for the near-field, in other words.

Best regards

Jack Painter
Virginia Beach VA

913. Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 17:24:48 UTC
From: Solomon Fernblatt <spamfree@myhome>
Message-ID: <ypadnfGN2Y1Fr5TcRVn-tw@giganews.com>
Source record: 91831

I can remember back in the old days of this newsgroup, and newsgroups in general, that is was actually possible to get an answer to a question without things breaking out into a flame war. But it's been a long time since them old days, back when we carved out antennas out of wood and had to walk both ways uphill in the snow barefoot to get to our 1200 baud modems...

Lets see if we can get a good fight going, just for fun.

B&W Broadband Dipole

TinyTenna

Fractenna

EH antenna

Bilal Isotron

What other fighting words and phrases have I left out???

heehee

SF

914. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 17:36:28 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <wAaOc.152125$OB3.79090@bgtnsc05-news.ops.worldnet.att.net>
Source record: 91832

Most of the "fights" are promulgated by people who more or less believe
in what they are saying.

Mere trolls are simply ignored.

Solomon Fernblatt wrote:
> I can remember back in the old days of this newsgroup, and newsgroups in
> general, that is was actually possible to get an answer to a question
> without things breaking out into a flame war. But it's been a long time
> since them old days, back when we carved out antennas out of wood and
> had to walk both ways uphill in the snow barefoot to get to our 1200
> baud modems...
>
> Lets see if we can get a good fight going, just for fun.
>
> B&W Broadband Dipole
>
> TinyTenna
>
> Fractenna
>
> EH antenna
>
> Bilal Isotron
>
> What other fighting words and phrases have I left out???
>
>
> heehee
>
> SF
>

915. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 17:48:32 UTC
From: Andy in NJ <"SHORECOGS at COMCAST DOT NET">
Message-ID: <NcmdnXCI6_7kpZTcRVn-rg@comcast.com>
Source record: 91833

"Solomon Fernblatt" <spamfree@myhome> wrote in message
news:ypadnfGN2Y1Fr5TcRVn-tw@giganews.com...
> I can remember back in the old days of this newsgroup, and newsgroups in
> general, that is was actually possible to get an answer to a question
> without things breaking out into a flame war. But it's been a long time
> since them old days, back when we carved out antennas out of wood and
> had to walk both ways uphill in the snow barefoot to get to our 1200
> baud modems...
>
> Lets see if we can get a good fight going, just for fun.

I don't see any of that BS because I've put in some nice filters. Messages from the known trouble makes (ie: Dan and Bruce) are automatically deleted, so I don't see them. Messages containing topics known to be trouble are also deleted.

All that is left is good posts with helpful responses.

--
73! de Andy KC2SSB
http://shorecogs.tripod.com
AIM: shorecogs

916. PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 18:05:41 UTC
From: DSL <retiredltNOSPAM@NOSPAMoptonline.net>
Message-ID: <V%aOc.18881$oE1.1782652@news4.srv.hcvlny.cv.net>
Source record: 91834
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Thank you for taking the time to read this.

Your Freedoms are in jeopardy! RadioShack Corporation has filed an injunction in a Texas Court that has shut down an opinion website, http://www.radioshacksucks.com, in direct violation of the Freedoms of Speech, Expression and Peaceful Assembly, as guaranteed to us by the Constitution of the United States. If other companies learn of this, they will use it against any website that speaks out against that company. This is extremely dangerous, as it will change the face and scope of the Internet.

If Big Business continues to dominate our lifestyles, we will lose our freedom to worship as we see fit. We will lose our freedom to vote for the candidate that we think will do the better job. We will lose our freedom of the press to accurately report on current events. We will lose everything we have fought and died for in the past 228 years Do not tell this to the descendants of those that have bravely fought in previous battles and wars, for their ancestors would have died in vain. The Constitution will have been overruled by Big Business.

RadioShack is on a vicious witch hunt and will not stop until they dominate our lives. RadioShack must be stopped now, before it gets any later or any worse.

Here is what you can do to help: copy this letter and add your signature to the bottom. Mail it to the following people:

Leonard H Roberts
CEO RadioShack Corporation
100 Throckmorton Plaza
Ft Worth, TX 76102

The Honorable Kenneth Curry
401 W BELKNAP
153RD DISTRICT COURT
FORT WORTH, TX, 76196-0225

Thank you for your help and support.

917. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 18:18:07 UTC
From: fractenna@aol.com
Message-ID: <20040729141807.05810.00001496@mb-m27.aol.com>
Source record: 91835

>RadioShack is on a vicious witch hunt and will not stop until they dominate
>our lives.

Hmmm.. I thought they were just trying to help out when people need
electronics.

Actually, I've found RS to be friendlier, better stocked, and less prone to
insist on trying to sell me a cell phone recently.

They switched their parts SKU's to drawers a while back, but they still have a
pretty good inventory. The local one here is fun to visit, and a ham is the GM.

I like going there. Can't always say that was so, but a good place these days.

Hope this helps. My speculation is that if an injunction was issued against
that web site, it was for interference of business and/or libel. Appears the
judge must have thought the case was compelling.

73,
Chip N1IR

918. Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 18:27:49 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <4ofig0toruoenemi3au67q8jk41ld040fc@4ax.com>
Source record: 91836

Just bought the MFJ-269 antenna analyzer.

Got the MFJ accessory pack, 99C, with 10 rechargeable batteries and the MFJ 1312D AC adaptor, which has 12 volts dc output.

Instructions for trickle-charging batteries inside MFJ antenna analyzer say an external source of "at least" 13 volts is needed -- and sez the MFJ 1315 supply will do this.

Looked at the MFJ web site -- they seem to no longer sell the MFJ 1315 supply.

How the hell do I charge up my batteries, using the analyzer's built-in trickle charger? The 1312D adaptor seems to be about a volt short, at 12 volts output. Anyone tried using that adaptor?

Bob
k5qwg

919. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 18:35:40 UTC
From: DSL <retiredltNOSPAM@NOSPAMoptonline.net>
Message-ID: <0sbOc.19100$oE1.1848417@news4.srv.hcvlny.cv.net>
Source record: 91837
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

For more information and daily updates please visit:
http://socaltom.blogspot.com/

920. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 19:16:13 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <12cOc.18647$Nu4.6821@nwrddc01.gnilink.net>
Source record: 91838

Bob

If youare ineresting in making your own charger, I'd guess that I could help.

Jerry

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message news:4ofig0toruoenemi3au67q8jk41ld040fc@4ax.com...
> Just bought the MFJ-269 antenna analyzer.
>
> Got the MFJ accessory pack, 99C, with 10 rechargeable batteries and
> the MFJ 1312D AC adaptor, which has 12 volts dc output.
>
> Instructions for trickle-charging batteries inside MFJ antenna
> analyzer say an external source of "at least" 13 volts is needed --
> and sez the MFJ 1315 supply will do this.
>
> Looked at the MFJ web site -- they seem to no longer sell the MFJ
> 1315 supply.
>
> How the hell do I charge up my batteries, using the analyzer's
> built-in trickle charger? The 1312D adaptor seems to be about a volt
> short, at 12 volts output. Anyone tried using that adaptor?
>
> Bob
> k5qwg
>
>
>

921. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 19:40:20 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <EocOc.2271$9Y6.1747@newsread1.news.pas.earthlink.net>
Source record: 91839
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"DSL" <retiredltNOSPAM@NOSPAMoptonline.net> wrote

>
> RadioShack is on a vicious witch hunt and will not stop until they
dominate
> our lives. RadioShack must be stopped now, before it gets any later or
any
> worse.
>

Radioshack wants to dominate my life? First I'd heard of it.

Get a grip on reality!

73, de Hans, K0HB

922. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 19:43:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gikqb63jfagfe@corp.supernews.com>
Source record: 91840

I've seen a selection of "wall warts" at just about every flea market I've been to, and have added quite a few to my collection from various defunct and obsolete pieces of equipment. A lot of them put out 15 volts or so DC at a couple of hundred mA, which is what you need. If you don't want to wait for the next flea market, try Radio Shack or a radio or computer parts store like Fry's, or eBay. You might have to replace the connector with a compatible one, and be sure the polarity is correct.

Roy Lewallen, W7EL

Bob Miller wrote:

> Just bought the MFJ-269 antenna analyzer.
>
> Got the MFJ accessory pack, 99C, with 10 rechargeable batteries and
> the MFJ 1312D AC adaptor, which has 12 volts dc output.
>
> Instructions for trickle-charging batteries inside MFJ antenna
> analyzer say an external source of "at least" 13 volts is needed --
> and sez the MFJ 1315 supply will do this.
>
> Looked at the MFJ web site -- they seem to no longer sell the MFJ
> 1315 supply.
>
> How the hell do I charge up my batteries, using the analyzer's
> built-in trickle charger? The 1312D adaptor seems to be about a volt
> short, at 12 volts output. Anyone tried using that adaptor?
>
> Bob
> k5qwg
>
>
>

923. Re: little radios with big antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 20:00:05 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <b4qdnYOfm8-jypTcRVn-sQ@comcast.com>
Source record: 91843

> He can't wait for Christmas. Confident after reading the "make 50 ohm
> cable from 75 ohm cable?" thread, his eyes turn toward the 75 ohm
> _family VHF TV antenna_. Will trying to transmit 144 MHz at 5W thru it
> fry his handi talkie?

I can't imagine why it would.
The TV antenna is a log periodic, though it isn't really designed to cover this band.
The Balun at the top may be marginal at 5W, maybe not.
TV antennas are horizontally polarized, and most VHF FM work is vertical, so this is pretty much a bad idea, but not fatal.

However, an HT's output has to take into account a highly variable antenna impedance, so while I wouldn't expect very good results, I also wouldn't expect any smoke.

I'd suggest Jr build a tiger-tail first, or as my nephew did once, sit on a National Guard tank.

924. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 20:36:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8hnig050rg7nr9s6gs33tpd5roi2pm6si7@4ax.com>
Source record: 91844

On Thu, 29 Jul 2004 12:49:35 +0800, Dan Jacobson <jidanni@jidanni.org>
wrote:

>[Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
>ohm cable.] Recalling the way resistors and capacitors can be hooked
>in series or parallel, say, do parallel cables halve or double the
>ohms?

Hooked in series, double; hooked in parallel, half.

>Wait, this is all a waste of cable. OK, never mind.

Hi Dan,

No. You already asked. Yes, a waste of time because you don't get
any benefit of "higher Z" through twin lining it - the overall loss is
still the same. Now, if you simply ignored the inner, stripped off
the coax jacket (reported as lossy), built spacers and used the
shielding as paired conductors; then you may observe some benefit.
(Who said free was cheap?)

73's
Richard Clark, KB7QHC

925. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 21:00:55 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <84pig018plil830bgdb1ea35ss63tlrtvr@4ax.com>
Source record: 91845

On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt <spamfree@myhome> wrote:

>I can remember back in the old days of this newsgroup, and newsgroups in
>general, that is was actually possible to get an answer to a question
>without things breaking out into a flame war. But it's been a long time
>since them old days, back when we carved out antennas out of wood and
>had to walk both ways uphill in the snow barefoot to get to our 1200
>baud modems...
>
>Lets see if we can get a good fight going, just for fun.
>
>B&W Broadband Dipole
>
>TinyTenna
>
>Fractenna
>
>EH antenna
>
>Bilal Isotron
>
>What other fighting words and phrases have I left out???
>
>
>heehee
>
>SF

Well, for starters you might bring Ted Hart out of the woodwork to tell us how he changes the phase between the electric field and magnetic fields in his 'EH' antenna to increase the gain. It seems to me there might be a few good whoppers there.

Walt, W2DU

926. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 21:21:29 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41099dd6_1@news1.prserv.net>
Source record: 91863

Why, he reverses the direction of the Poynting Vector. I thought everyone knew that. Goes into the "antenna" instead of out.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Walter Maxwell" <w2du@iag.net> wrote in message
news:84pig018plil830bgdb1ea35ss63tlrtvr@4ax.com...
>
> Well, for starters you might bring Ted Hart out of the woodwork to tell us how
> he changes the phase between the electric field and magnetic fields in his 'EH'
> antenna to increase the gain. It seems to me there might be a few good whoppers
> there.
>
> Walt, W2DU

927. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 21:49:58 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <xgeOc.2139$Jo1.1004@lakeread01>
Source record: 91846

"Solomon Fernblatt" <spamfree@myhome> wrote in message
news:ypadnfGN2Y1Fr5TcRVn-tw@ >
> What other fighting words and phrases have I left out???
>
>
> heehee
>
> SF
>

Conjugate Match

928. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 21:51:27 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <zjeOc.2330$9Y6.224@newsread1.news.pas.earthlink.net>
Source record: 91847

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:xgeOc.2139$Jo1.1004@lakeread01...
>
> "Solomon Fernblatt" <spamfree@myhome> wrote in message
> news:ypadnfGN2Y1Fr5TcRVn-tw@ >
> > What other fighting words and phrases have I left out???
> >
> >
> > heehee
> >
> > SF
> >
>
> Conjugate Match
>
>
bazooka

929. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 21:54:17 UTC
From: Dave <noone@nowhere.com>
Message-ID: <o_SdnZHVS4yE75TcRVn-jQ@crocker.com>
Source record: 91848

just use the 75 ohm stuff in place of the 50. nothing special needed, swr only slightly affected. don't pick nits, get on the air.

btw, parallel cables by hooking their shields and center conductors together gives you 1/2 the impedance of one alone, so two 75 ohm ones in parallel give 37.5 ohms. this can be useful when building matching networks for stacks of yagis or other situations where you need an impedance transformer.

"Dan Jacobson" <jidanni@jidanni.org> wrote in message news:87zn5j1kps.fsf@jidanni.org...
> [Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
> ohm cable.] Recalling the way resistors and capacitors can be hooked
> in series or parallel, say, do parallel cables halve or double the
> ohms? One center lead to one side of the dipole, the other center
> lead to the other side of the dipole. The braids hooked together I
> suppose. Or, both center leads hooked to top side of dipole, both
> braids hooked to bottom side of dipole. All kind of combos possible.
> Wait, this is all a waste of cable. OK, never mind.

930. Re: Earthing systems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:01:02 UTC
From: Dave <noone@nowhere.com>
Message-ID: <88ednTtzWa437pTcRVn-pw@crocker.com>
Source record: 91849
Cross-posted to: alt.energy.high-voltage,rec.radio.amateur.antenna

try searching your library for recent papers by leu and darveniza (i hope those spellings are correct) and john anderson. check cigre, ieee, and recent iclp papers. if your university can contact epri you may also be able to get some reports on our research from there.

<mmufoe2004@yahoo.com> wrote in message news:b770165c.0407290047.7e6e102d@posting.google.com...
> I am Ram , Ph.D. Student
>
>
> Dear sir/madam,
>
> I am trying to find out the correlation between the time delays in
> conduction mechanism and the degree of earth resistance.
>
> I am using PSPICE simulation package for the simulation work , any
> suggestions to give help welcome
>
>
>
> Research Title:
>
> INVESTIGATION OF THE TRANSIENT BEHAVIOUR OF EARTHING SYSTEMS SUBJECTED TO
> HIGH IMPULSE CURRENTS
>
>
> One of the research objectives is to observe the correlation between the
> time delays in conduction mechanism and the degree of earth resistance for
> different soil resistivity, impulse polarity and earth electrode
> configuration
>
>
>
> Time delays can be defined as the time taken to reach the current peak.
> Generally, the time delay can also be influenced by non-uniform water
> settling process, drying and heating in soil and of course due to the
> statistical nature of air breakdown. However, these influences are
> neglected in determining the correlation between the time delays and earth
> resistance reduction.
> In the previous studies, the time delays in soil due to ionisation and
> heating have been plotted against current/voltage magnitudes. It was found
> that the time delays were decreasing with higher currents/voltages.
> However, the tune delays were also taught to be due to a statistical

> nature of air breakdown.
>
> If you have any question welcome
>
> I am looking forward to hear from you soon
>
> Thanks in advance
>
> Ram

931. Re: Halle Berry naked

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:09:21 UTC
From: tomorrowthanyouthink@yahoo.com
Message-ID: <d8f1a7ac.0407291409.76d30434@posting.google.com>
Source record: 91850
Cross-posted to: japan.app.postpet,hannover.fundgrube,alt.military.police,alt.engr.dynamics,rec.radio.amateur.antenna,rec.arts.sf.movies,han.soc.culture.chejudo,es.humanidades.gramatica

"Dr. Daffodil Swain" <wa4jm@earthlink.net> wrote in message
news:<jxLNc.16774$iK.12022@newsread2.news.atl.earthlink.net>...
> > Halle Berry naked Halle Berry naked Halle Berry naked Halle Berry naked
> >
> >
> >Who cares.
> >
> >

& she's narcisstic ruining her .all over.andmoreagain.Gimme Dolly Parton.T

932. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:13:19 UTC
From: Arnie <nospam@nospam.com>
Message-ID: <4109767F.5070501@nospam.com>
Source record: 91853

Dave wrote:

>just use the 75 ohm stuff in place of the 50. nothing special needed, swr
>only slightly affected. don't pick nits, get on the air.
>
>btw, parallel cables by hooking their shields and center conductors together
>gives you 1/2 the impedance of one alone, so two 75 ohm ones in parallel
>give 37.5 ohms. this can be useful when building matching networks for
>stacks of yagis or other situations where you need an impedance transformer.
>
>"Dan Jacobson" <jidanni@jidanni.org> wrote in message
>news:87zn5j1kps.fsf@jidanni.org...
>
>
>>[Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
>>ohm cable.] Recalling the way resistors and capacitors can be hooked
>>in series or parallel, say, do parallel cables halve or double the
>>ohms? One center lead to one side of the dipole, the other center
>>lead to the other side of the dipole. The braids hooked together I
>>suppose. Or, both center leads hooked to top side of dipole, both
>>braids hooked to bottom side of dipole. All kind of combos possible.
>>Wait, this is all a waste of cable. OK, never mind.
>>
>>
>
>
>
>
But putting two 75 ohm cables in series will only give you a longer 75
ohm cable.

933. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:25:39 UTC
From: wolfee <clambrain@com.invalid>
Message-ID: <DPeOc.349677$Gx4.319225@bgtnsc04-news.ops.worldnet.att.net>
Source record: 91851

Hal, if it is digital in the AM band and digital in the FM band then how can we differentiate if we dont call it AM digital and FM digital? I think you should visit the designers site at www.ibiquity.com for some enlightenment.

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message news:Tx%Nc.1360$N%3.347@bignews6.bellsouth.net...
> sorry to break the news
> its AM OR Digital - but not AM digital and not digital AM
>
>
> "wolfee" <clambrain@com.invalid> wrote in message
> news:1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net...
> > I thought it was already here. ibiquity lists stations broadcasting and
> > manufacturers delivering digital receivers right now.
> >
> > "RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
> > news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
> > >
> > > > I just bought a Terk Advantage antenna. It really does help my cheap
> > > little
> > > > table top radio get stations a lot farther away. Will I still be able
> > to
> > > > use it when digital AM radio arrives?
> > > >
> > > I will tell you when Digital AM radio arrives !!!
> > >
> > > Steve
> > >
> > >
> > >
> > >
> >
> >
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
>
>

934. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:26:18 UTC
From: jgboyles@aol.com
Message-ID: <20040729182618.10414.00000461@mb-m23.aol.com>
Source record: 91852

> What other fighting words and phrases have I left out???

How a Bird wattmeter works:-).
73 Gary N4AST

935. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:40:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9o2dnY3SHZKf4JTcRVn-vQ@crocker.com>
Source record: 91854

```
"Arnie" <nospam@nospam.com> wrote in message
news:4109767F.5070501@nospam.com...
> Dave wrote:
>
> >just use the 75 ohm stuff in place of the 50. nothing special needed,
swr
> >only slightly affected. don't pick nits, get on the air.
> >
> >btw, parallel cables by hooking their shields and center conductors
together
> >gives you 1/2 the impedance of one alone, so two 75 ohm ones in parallel
> >give 37.5 ohms. this can be useful when building matching networks for
> >stacks of yagis or other situations where you need an impedance
transformer.
> >
> >"Dan Jacobson" <jidanni@jidanni.org> wrote in message
> >news:87zn5j1kps.fsf@jidanni.org...
> >
> >
> >>[Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
> >>ohm cable.] Recalling the way resistors and capacitors can be hooked
> >>in series or parallel, say, do parallel cables halve or double the
> >>ohms? One center lead to one side of the dipole, the other center
> >>lead to the other side of the dipole. The braids hooked together I
> >>suppose. Or, both center leads hooked to top side of dipole, both
> >>braids hooked to bottom side of dipole. All kind of combos possible.
> >>Wait, this is all a waste of cable. OK, never mind.
> >>
> >>
> >
> >
> >
> >
> >
> But putting two 75 ohm cables in series will only give you a longer 75
> ohm cable.
>

if you run two of them in parallel but don't connect the center conductors
it gives you a shielded balanced line, but what impedance??
```

936. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:49:18 UTC
From: Phil Witt <w4imm@mindspring.com>
Message-ID: <4bvig01phodnq3pejdofsndevkgleu3f70@4ax.com>
Source record: 91855
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

What's wrong with Radio Shack, anyway? I bought something there both yesterday and today. Had what I wanted a cheap enough. No problems.

Anybody can sue anybody. Why should this upset anybody. That's the American way. Sue enough people and you might even become a politician......maybe even a presidential or vice-presidential candidate. My freedoms are certainly not in jeopardy because RS sues somebody....quite the opposite. This just shows what freedoms we have.

On Thu, 29 Jul 2004 18:05:41 GMT, "DSL"
<retiredltNOSPAM@NOSPAMoptonline.net> wrote:

>Thank you for taking the time to read this.
>
>Your Freedoms are in jeopardy!

937. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:49:41 UTC
From: jgboyles@aol.com
Message-ID: <20040729184941.11452.00001687@mb-m23.aol.com>
Source record: 91857

>But putting two 75 ohm cables in series will only give you a longer 75
>ohm cable.

Exactly, I guess that is why they have a whole section devoted to transmission line theory, and a section devoted to circuit theory. They differ.

73 Gary N4AST

938. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 22:49:55 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <nafOc.1890$Jp6.1229@newsread3.news.atl.earthlink.net>
Source record: 91856

"J999w" <j999w@aol.com> wrote in message
news:20040729023657.13589.00002396@mb-m12.aol.com...
> >The Cushcraft 5 elements were very poor performers for the length.
>
> Hmmmm, could be why I'm only at 150 grids and 8 countries since April
running
> 80 watts with my Cushcraft 5 el at 35 ft.
>

When 6 meters is open it does not take much of an antenna. The first contact I made on 6 with a transverter I just finished was from North Carolina to Canada using about 10 watts to a trapped dipole cut for 40 to 10 meters. It was the only antenna I had up for anything lower than 2 meters and I just wanted to see if I could hear anything on the transverter. I bought a 5 element CC because I just read the end of the box and it said 50 to 54 mhz. I did not take time to see that it could only be tuned for about a mhz or two before the swr went way too high. I later extended the boom from about 12 feet to 16 feet and it made a noticiable differance on the signals when there was no skip.

As usual CC puts too many elements on too short of a boom.

939. FS**MFJ ITEMS (tuners,etc) and GRID DIP METERS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 23:05:50 UTC
From: kf6ikc@sbcglobal.net
Message-ID: <464af06c.0407291505.1846a08b@posting.google.com>
Source record: 91859
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.swap,rec.radio.amateur.antenna,rec.radio.swap

Hello gang. Here are some MFJ items,and some grid dip meters. All items are PLUS shipping and boxing from 96002.

Eico 710 grid dip meter w/coils and manual. In the original box and looks almost new. $20.00

Heathkit grid dip meter w/coils and manual. fair to good cond. $15.00

MFJ Differential-T 3KW tunes. In ex.cond. Only low power used with it. $150.00

MFJ Versa Tuner III model MFJ-962C 1.5KW tuner in ex.cond. Only used with low power. $125.00

MFJ-941D Versa Tuner II 300 watt tuner in very good cond. Only used with low power. $40.00

MFJ-202 Noise Bridge in very good cond. $15.00

MFJ-525B RF Speech Processor in good cond. Some scratches on case. Face is fine. Great reveiws on this unit. Nice for old BA equipment that does not have built in pros. $40.00

MFJ-207 HF SWR Analyzer in ex.cond. Original box and manual. $20.00

MFJ-752C Signal Enhancer II. Audio filter. In good cond. Scratches on face. $20.00.

Pleas email me direct at kf6ikc@sbcglobal.net if you responed to the list I probably wont get back to you as I do not read them often.

Take care,Stan

940. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 23:21:00 UTC
From: Radio N6BHU <n6bhu@qsl.net>
Message-ID: <Pine.LNX.4.58.0407291617410.20093@torquay.cahuenga.com>
Source record: 91860
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It's just Bog Business doing what they do best -- they think they own the English language, along with everything else on planet Earth. (It's also par for the course these days.) So, who's ready to try and stop 'em?

...Dave, N6BHU

On Thu, 29 Jul 2004, DSL wrote:

> For more information and daily updates please visit:
> http://socaltom.blogspot.com/
>
>
>

941. Re: Does external antenna negate the built in

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 23:40:56 UTC
From: Melchizedek@USA.com
Message-ID: <2275a3c5.0407291540.1e4d36b1@posting.google.com>
Source record: 91861

"James" <jrapier@dcr.net> wrote in message
news:<8AONc.2466$79.1875@fe39.usenetserver.com>...

> No. The whip antenna is for shortwave and FM. There is a built-in ferrite
> antenna for medium wave and external connection for AM/shortwave. After
> pondering over it I think the whip and the ferrite are both active at the
> same time as well as any external.

You might not see the offensive side of Rapier, but if you look up his harrasing messages spanning years on sci.environment you'll see what I mean.

James Rapier from old Kentucky way believes the lies that Killers feed the public. Killers Koch would just as easily have killed James Rapier as Killer Koch's did Danielle Smalley and Jason Stone, except just by accident it was Smalley & Stone instead of Rapier that lived near Koch's pipeline. For 11 years Koch's never spent a dime inspecting that pipeline. This is the America that Rapier wants for everybody, where Killers spend $60,000,000 of Organized Crime money subverting America through a series of crooked think tanks and paid-off science-hoax "Whitecoats" liars. Not one scientist arguing against global warming is found free from Koch puppet-strings through Koch'ss organized crime empire of think tanks -- NOT ONE! There is not one single scientist in North America disputing Global Warming except those on the corrupt payrolls of dirty killers like Koch.

James Enviro-Rapist is a sucker for Koch propaganda. Rapier has a big fat Koch in his mouth that he is sucking on. "Blowjob Rapier's" morals suck, and he is not qualified to participate in public affairs.

Here are the Global Warming counterfacts (partial list):

* 1992 -- "Warning to Humanity" petition circulates, signed by 1,700 working CREDIBLE scientists.
* 1992 -- Oil, Coal, pollution-industries counter-attack at Rio conference, fake Heidelberg Appeal circulates with their funding, using their paid-science-traitors, like the documented corrupt Fred Singer, documented corrupt Fred Seitz, documented corrupt Bruce N. Ames.
* 1997-1998 -- hottest ocean temperatures ever recorded in human history.
* 1998 -- hottest year in recorded human history.
* 1998 -- 86% of all corals bleached, came 2 degrees from known heat-death of species, and 10 days away from known heat-associated digestion failure starvation deaths. No fossil record shows such massive simultaneous incident ever in global geologic history other

than 5 mass extinction incidents.
* 1999 -- strongest super-cyclone (310km/h winds) in human recorded history hits Orissa, India. 1.9 million houses damaged or destroyed, 10,000 people swept out to drown at sea.
* 2002 -- Severe droughts on five continents simultaneously -- at one moment the crops to feed one sixth the human race are threatened by brutal killing weather.
* 2002-2003 -- Worst drought in Australia recorded human history leads to wildfires invading Austrialian capital city and burning down hundreds of city blocks. At one moment not long afterwards a 250 kilometer firefront threatened to engulf the entire largest city in that country, Sydney.
* 2003 -- More people displaced by flooding than any year in recorded human history, over twice the geographical area flooded than second-worst flood disaster year in recorded human history.
* 2003 -- 562 tornadoes sweep the USA in ten days -- largest swarm of tornadoes ever recorded in US history, almost 50% worse than previous historical record, and nearly three times worse than any May in US history.
* 2003 -- Largest hailstone in human recorded history falls in Nebraska, 18 inches diameter, "cannonball size" which denialists say is impossible according to THEIR understanding of physics. Canteloupe-sized, softball-sized, baseball-sized, golf ball-sized all fell in 2003 hell storms.
* 2003 -- Weeks of unrelenting pounding of constant storms finally break northeast US power grid, 50,000,000 utility customers blacked out in US and Canada. Indiana governor, Frank O'Bannon, dies of heart attack from stress of one declared sequential "state of emergency" after another. Indiana, Ohio, Pennsylvania, Illinois, Toronto especially hit hard.
* 2003 -- Worst forest firestorms in Portugal's recorded human history, blamed on excessive heat and changed air currents denying rainfall.
* 2003 -- 20,000 forest fires in Russia, 16,000 of them before the heat of summer, the largest number in human recorded history.
* 2003 -- 1,400 heat-stroke deaths in Andhra Pradesh, India from sustained heat wave and delayed monsoon -- largest mass heat-killing in local recorded human history.
* 2003 -- 35,000 excess heat-stroke deaths across Europe, largest mass heat-killing in European recorded history.

http://www.ecosyn.us/adti/Koctopus_01.html
http://www.ecosyn.us/adti/Killer_David_Koch.html
http://www.ecosyn.us/adti/CSE_Organized_Crime.html
http://www.ecosyn.us/adti/Corrupt_CFACT.html
http://www.ecosyn.us/adti/Corrupt_Idsos.html
http://www.ecosyn.us/adti/Seitz_Tobacco_Crimes.html
http://www.ecosyn.us/adti/Corrupt_Sallie_Baliunas.html
http://www.ecosyn.us/adti/Corrupt_Richard_S_Lindzen.html
http://www.ecosyn.us/adti/Corrupt_Fred_Michel.html

http://www.ecosyn.us/adti/Singer-Nightline.html
http://www.ecosyn.us/adti/Singer-1993-1994.html
http://www.ecosyn.us/adti/Singer-Seitz.html
http://www.ecosyn.us/adti/Stohrer-Singer.html
http://www.ecosyn.us/adti/Hazeltine-Singer.html
http://www.ecosyn.us/adti/Heidelberg-Appeal.html
http://www.ecosyn.us/adti/ADTI_Frauds_01.html
http://www.ecosyn.us/adti/AdTI_Villians.htm
http://www.ecosyn.us/adti/Pelosi.html
http://www.ecosyn.us/adti/Becky_Norton_Dunlop_AdTI.html
http://www.ecosyn.us/adti/Confronting_AdTI.html
http://www.ecosyn.us/adti/Walter_Williams_AdTI.html
http://www.ecosyn.us/adti/Chrispeels.html

942. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-29 23:47:16 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <f23jg0dc86d6mdfsm844ab77p98qvsquo2@4ax.com>
Source record: 91862

On Thu, 29 Jul 2004 12:43:06 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>I've seen a selection of "wall warts" at just about every flea market
>I've been to, and have added quite a few to my collection from various
>defunct and obsolete pieces of equipment. A lot of them put out 15 volts
>or so DC at a couple of hundred mA, which is what you need. If you don't
>want to wait for the next flea market, try Radio Shack or a radio or
>computer parts store like Fry's, or eBay. You might have to replace the
>connector with a compatible one, and be sure the polarity is correct.
>
>Roy Lewallen, W7EL

... thanks, Roy...

bob
k5qwg

943. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 00:53:39 UTC
From: Howard <mensch90249>
Message-ID: <b07jg0teva531hifkhqgjpq90gmefnde2a@4ax.com>
Source record: 91864

On Thu, 29 Jul 2004 21:51:27 GMT, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>
>" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
>news:xgeOc.2139$Jo1.1004@lakeread01...
>>
>> "Solomon Fernblatt" <spamfree@myhome> wrote in message
>> news:ypadnfGN2Y1Fr5TcRVn-tw@ >
>> > What other fighting words and phrases have I left out???
>> >
>> >
>> > heehee
>> >
>> > SF
>> >
>>
>> Conjugate Match
>>
>>
>bazooka
>
mutual coupling

944. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 01:25:36 UTC
From: Herbert Khaury <tiptoe@tulip.me>
Message-ID: <Y4GdnaxIN-MMPpTcRVn-pA@comcast.com>
Source record: 91865
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Radio Shack?.... That thing still around? Should change their name to
Cell-phone Shack.

--

945. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 01:45:59 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <rLhOc.2051$bM7.139@newssvr27.news.prodigy.com>
Source record: 91866

Must agree- Until about 15-18 years ago, cushcraft made (and so did
Hygain, ect) some real doozies for all bands, and had some of the most
outrageous claims for gain, when selling (advertizeing) them. This is
WHY the ARRL , until recent times wouldn't allow gain claims, unless you
could back them up!!
These are in the old "VHF'er magazine, gain MEASUERMENT CONTESTS!

Nov- 1965, San Jose Antenna contest:
64 El. Broadside Cushcraft (colinear) Measured gain-- 8.5 DBd !
16 foot Telrex 420M2116 Gain 9.2 DBd
and a real winner! 13 el HY-GAIN yagi Measured GAIN +1.0 DBd off the
front, but WAIT: measured GAIN of 9.0 OFF THE BACK !!!
And another TELREX 15 el yagi (probably no balun): - (yes thats NEG.
12 DBd off the front, but had a gain of + 6 DBd , off the side!! These
are all 432 ants, but you get the drift! And, BTW, the WINNER of thisw
contest was a 32 El. Extended Expanded Colinear (Frank Jones Handbook
with 18.6 DBd gain)!! If you have older ads for these , compair the
gains! But, after over 40 years on six, can personally verify that
power required is next to NOTHING, on a good opening (even had the power
to NILL, and carried on qso- even worked guy in Pennsylvania from
Oregon, with aprox. 50 PICOWATTS)! Granted, during F2, but -- oh well,
yours for consideration Jim NN7K

Ralph Mowery wrote:
> "J999w" <j999w@aol.com> wrote in message
> news:20040729023657.13589.00002396@mb-m12.aol.com...
>
>>>The Cushcraft 5 elements were very poor performers for the length.
>>
>>Hmmmm, could be why I'm only at 150 grids and 8 countries since April
>
> running
>
>>80 watts with my Cushcraft 5 el at 35 ft.
>>
>
>
> When 6 meters is open it does not take much of an antenna. The first
> contact I made on 6 with a transverter I just finished was from North
> Carolina to Canada using about 10 watts to a trapped dipole cut for 40 to 10
> meters. It was the only antenna I had up for anything lower than 2 meters
> and I just wanted to see if I could hear anything on the transverter. I
> bought a 5 element CC because I just read the end of the box and it said 50
> to 54 mhz. I did not take time to see that it could only be tuned for about
> a mhz or two before the swr went way too high. I later extended the boom

> from about 12 feet to 16 feet and it made a noticiable differance on the
> signals when there was no skip.
>
> As usual CC puts too many elements on too short of a boom.
>
>

946. Re: Does external antenna negate the built in

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 02:31:48 UTC
From: James <jrapier@dcr.net>
Message-ID: <qqiOc.3829$Zn2.2495@fe39.usenetserver.com>
Source record: 91867

"Psalm 110" <Melchizedek@USA.com> wrote in message
news:2275a3c5.0407291540.1e4d36b1@posting.google.com...
> "James" <jrapier@dcr.net> wrote in message
news:<8AONc.2466$79.1875@fe39.usenetserver.com>...
>
> > No. The whip antenna is for shortwave and FM. There is a built-in
ferrite
> > antenna for medium wave and external connection for AM/shortwave. After
> > pondering over it I think the whip and the ferrite are both active at
the
> > same time as well as any external.
>
> You might not see the offensive side of Rapier, but if you look up his
> harrasing messages spanning years on sci.environment you'll see what I
> mean.
>

You've got your ass kicked numerous times on sci.enviroment that you
regularly participate in. Not just from me but many others. You don't have
to pollute this one as well.

947. cell phone question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 02:42:59 UTC
From: mdiaczyk@yahoo.com
Message-ID: <6b5e8fcb.0407291842.38cf93fa@posting.google.com>
Source record: 91868

I live in a fairly un populated area in Bradenton Florida. There is a lot of trees around. I have a weak signal if I can get one at all how can attach somthing to my balcony of my house preferably a multidirectional antenna, so I don't have to aim it just right. Somthing similar to a marine Vhf or Loran antenna or something on that line. My two reasons for this are I dont want to deal with the home owners association or lightning. My other problem is my family has three carriers one alltel one tmobile and cingular. will one antenna work?

Also I was in Idaho in a valley and I coudnt get a signal at all what can be done there. Thanks Mike

948. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 02:48:38 UTC
From: j999w@aol.com
Message-ID: <20040729224838.18573.00000359@mb-m22.aol.com>
Source record: 91869

Yeah, you're right, what was I thinking.

jw
k9rzz
(NOT!)

949. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 03:39:21 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <JpjOc.2728$cK.2218@newsread2.news.pas.earthlink.net>
Source record: 91870
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Herbert Khaury" <tiptoe@tulip.me> wrote

> Radio Shack?.... That thing still around? Should change their name to
> Cell-phone Shack.

Cell phones are radios too.

950. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 04:22:09 UTC
From: JOE <JOEnospam7745@hotmail.com>
Message-ID: <73d70a0cc13efc4b4d014ebd93f6de4a@news.meganetnews.com>
Source record: 91771
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

yawn

"DSL" <retiredltNOSPAM@NOSPAMoptonline.net> wrote in message
news:V%aOc.18881$oE1.1782652@news4.srv.hcvlny.cv.net...
> Thank you for taking the time to read this.
>
> Your Freedoms are in jeopardy! RadioShack Corporation has filed an
> injunction in a Texas Court that has shut down an opinion website,
> http://www.radioshacksucks.com, in direct violation of the Freedoms of
> Speech, Expression and Peaceful Assembly, as guaranteed to us by the
> Constitution of the United States. If other companies learn of this, they
> will use it against any website that speaks out against that company. This
> is extremely dangerous, as it will change the face and scope of the
> Internet.
>
> If Big Business continues to dominate our lifestyles, we will lose our
> freedom to worship as we see fit. We will lose our freedom to vote for the
> candidate that we think will do the better job. We will lose our freedom
of
> the press to accurately report on current events. We will lose everything
we
> have fought and died for in the past 228 years Do not tell this to the
> descendants of those that have bravely fought in previous battles and
wars,
> for their ancestors would have died in vain. The Constitution will have
been
> overruled by Big Business.
>
> RadioShack is on a vicious witch hunt and will not stop until they
dominate
> our lives. RadioShack must be stopped now, before it gets any later or any
> worse.
>
> Here is what you can do to help: copy this letter and add your signature
to
> the bottom. Mail it to the following people:
>
> Leonard H Roberts
> CEO RadioShack Corporation
> 100 Throckmorton Plaza
> Ft Worth, TX 76102
>

> The Honorable Kenneth Curry
> 401 W BELKNAP
> 153RD DISTRICT COURT
> FORT WORTH, TX, 76196-0225
>
>
> Thank you for your help and support.
>
>
>

951. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 05:02:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gjlj180511uea@corp.supernews.com>
Source record: 91772

Wes Stewart wrote:
>
> Let me give you a real world example, not from my test equipment
> environment but from a design environment.
>
> The transmitter in the late version of the Phoenix Missile used as its
> final "amplifier" (really an injection-locked oscillator) a cavity
> with sixteen coupled Impatt diodes. This is difficult to describe in
> words, but I'll try
>
> Each diode presented about -2 ohm, which was transformed up (or down,
> depending on semantics) to some "higher" value of negative resistance
> via some very low impedance quarter-wave coaxial lines. Each of these
> lines then became smaller diameter pins that exited one face of a
> radial cavity and passed through the cavity near the outside wall,
> thus coupling energy into and out of the cavity. On the opposite face
> of the cavity, the pins became an air dielectric coaxial line as they
> passed through another set of bores. Operating bias was supplied to
> the pins on the output side of these bores.
>
> To "seal" the face of the second cavity wall we wanted to present a
> high impedance at the cavity end of each of the 16 bores. A low
> frequency equivalent would be the plate choke in an h-f amplifier and
> to prevent any energy from dribbling out to the power supply, we
> needed an equivalent of the B+ bypass capacitor.
>
> The operating bias was supplied by 16 pulsed current sources at a
> classified frequency, but suffice it to say that we didn't want any
> bypass capacitors on the ends of these pins, not that they would have
> been effective at 10 GHz anyway.
>
> The solution was to add some *dissipative* Eccosorb "dielectric" to
> these lines at an odd multiple of one quarter wavelength from the face
> of the cavity. The *magic* impedance inverting property of quarter
> wave lines was used to transform this low dissipative impedance to a
> much higher, almost dissipationless impedance at the cavity.
> I submit that the same thing can happen when using dissipative baluns.
>
> Clearly, as you state above, we don't have much of a clue as to the
> surge impedance of the outside of the coax or its effective length so
> computation can be difficult. But intermediate values of balun
> resistance aren't necessarily bad if they are located at a position
> that minimizes I.
>

> For broadband applications there is probably some optimum way of
> populating the line with ferrite, but this is likely an intractable
> problem, best solved by making the whole length of the line ferrite,
> which is where I came in. [g]
>
I'm not sure you can extrapolate this to the problem at hand. For an illustration, open the EZNEC model VHFGP.ez, and add a wire from 0,0,5 to 0,0,3.25, 40 segments. This will behave like a more-or-less worst case transmission line. You'll see that there's substantial current on the new wire, with a maximum at the top -- where it connects to the ground plane -- and cyclic loops of current along its length. At about 1/4 wavelength from the top, the current is very low. Insert a load at that point (14% from end 1). You'll see that a low impedance at that point isn't transformed to a high impedance at the top of the wire. In fact, it doesn't matter hardly at all what impedance you insert at that point -- it has very little effect on the current at the top. This shouldn't be a surprise, since elementary circuit theory tells us we can insert any resistance at a point of zero current without upsetting anything. A resistance at the top of the wire, though, will reduce the current at that point.

Now set the power to a constant value, say 100 watts, via the Options menu, and look at the power dissipated by a load inserted at the top of the wire (wire 6, 0% from end 1). Maximum dissipation (about 2 watts) occurs with a load resistance of about 100 ohms. The current at that point is minimized with a high resistance, although it doesn't have much effect on the current on the rest of the wire beyond about 1/4 wavelength from the top. In this interesting case, you need a balun at an odd number of quarter wavelengths from the bottom of the wire to suppress the induced current, and another at the top of the wire to suppress the conducted current.

Put a single load about a half wavelength from the top (29% from end 1), at one of the current maxima. You'll find that you can get up to nearly 6 watts dissipation in the load (seen by clicking Load Dat) by varying the load resistance, with the maximum at about 100 ohms. If you add a second load at the next current maximum down (57% from end 1), you can get over 6 watts total dissipation in the loads by making each load 50 ohms. And at that, they do a poor job of suppressing the current. This is a very crude example of a poorly designed "distributed balun", where the dissipation is high and the current suppression poor.

Now, the amount of dissipation illustrated here is insignificant in terms of signal strength loss, and I suspect that this is usually true. That is, even a poorly designed and/or placed resistive balun is unlikely to cost you any signal strength. But the dissipation can easily produce unacceptable heating of the balun. Also, the fact that the current is high enough at the balun location to cause substantial dissipation means that the balun isn't doing its job as it should -- the whole purpose is to reduce the current to a low value.

Roy Lewallen, W7EL

952. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 06:31:10 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <Xk1J0YDuseCBFA$J@ifwtech.co.uk>
Source record: 91773

JGBOYLES wrote:
>> What other fighting words and phrases have I left out???
>
>How a Bird wattmeter works:-).

Ouch!

Ya got me that time... :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

953. Re: cell phone question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 10:53:07 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <ktlpt1-6ph.ln1@p400bob.lse.com.au>
Source record: 91774

Hi Mike

Lots of possibilities here. Dont know if the following will help;

- The higher and clearer any external antenna you use the better it will work. Of coure you only need get adequate signal for it to work.
- Coax/transmission loss is a large problem on cellphone frequencies for long runs. I cant really give a quantitative answer here but dont run more than (say) 15ft of cable if it is 1/4" in diameter.
- The carriers in Oz quite often give publish site and coverage maps. From them it is often easy to determine which direction the base stations lie in. This will give you a rough indication of where to "point" an antenna or at least what side of the house to put it on.
- Going out and buying a cellphone antenna and simply moving it around looking for a strong signal might work. Problem is different carriers may have very different frequencies. There are also a lot of crap cheap antennas out there! Although an antenna can be made to easily to cover one band (say 950MHz odd) it requires a good design to cover two bands effectively and in your case with useful gain. Personally I'd have a play with a wideband gain antenna like a helix or maybe two corner reflectors (for the 2 freqs).
- Having three users on one antenna is also problematic. Lots of techie ways to do this but you may like to consider a passive repeater (an antenna inside the house that you hold the phone close too, joined to another outside the house with some coax) To be fair there have been NG posters who have mentioned that it never seems to work, but it has for me and is used in some of my works commercial installations.
- Cellphone coverage never covers everywhere. A valley is a pretty bad place if there isnt a base station mounted nearby. If your provider uses GSM there is also a 32km odd maximum distance you can use it from the base station. I am not suggesting it will work up to 32km. It just wont work past it even though you may see adequate signal in test mode. The answer in Australia where there is a lot of area not covered is to use a satphone, with the associated higher cost.

Apologies for not giving you a definitive answer. If I was tackling the problem I'd list where the nearest sites were for each carrier and what freqencies they were using. Then I'd throw together a quick antenna of theoretical dimensions (maybe an extended double ZEPP - I wouldnt bother tuning it) and make some hard measurements on various places on the balcony. From that I could determine if higher gain was needed and whether I could use the passive repeater system.

Cheers Bob VK2YQA

mike wrote:
> I live in a fairly un populated area in Bradenton Florida. There is a
> lot of trees around. I have a weak signal if I can get one at all how
> can attach somthing to my balcony of my house preferably a
> multidirectional antenna, so I don't have to aim it just right.
> Somthing similar to a marine Vhf or Loran antenna or something on that
> line. My two reasons for this are I dont want to deal with the home
> owners association or lightning. My other problem is my family has
> three carriers one alltel one tmobile and cingular. will one antenna
> work?
>
> Also I was in Idaho in a valley and I coudnt get a signal at all what
> can be done there. Thanks Mike

954. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 12:01:28 UTC
From: Kent <kaw61@yahoo.com>
Message-ID: <pLqOc.52183$6t1.49781@twister.rdc-kc.rr.com>
Source record: 91775

How exactly would I put together a bi directional antenna? I am using
commerically made antennas. I guess it is how I feed them??

"Bob Bob" <bcnntp@optusnet.com.au> wrote in message
news:jg88t1-2l7.ln1@p400bob.lse.com.au...
> Hi Kent
>
> Very workable. Odd multiples of 75 ohm coax to the antennas with a T
> connection at/near the phone.
>
> There are also power splitters/combiners available for phasing antennas
> available. Will be more expensive though.
>
> Personally since you are talking 180 degrees, I'd put together a
> bidirectional antenna though. The possibilities are endless here!
>
> Cheers Bob VK2YQA
>
> Kent wrote:
> > I am working with a client that needs to have directional yagis, pointed
180
> > from each other, for a cell phone repeater.
> >
> > I was thinking about using 1/2 wave lines and putting them into a "TEE".
> >
> > Any suggestions?
> >
> > THANKS!
> >
> > Kent
> > K9EZ
> >
> >

955. Re: Combining Cell phone Yagis in different directions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 12:02:22 UTC
From: Kent <kaw61@yahoo.com>
Message-ID: <eMqOc.52184$6t1.40440@twister.rdc-kc.rr.com>
Source record: 91776

Well since they are commerically made antennas, FCC approved, I think we are OK.

As far as the cell companies, they get more business. You think they would complain?

"JLB" <IHateSpam@nospam.net> wrote in message news:n5NNc.2350$79.1481@fe39.usenetserver.com...
> And what does the cell phone company think of this?
>
> Not to mention the FCC.
>
> --
> Jim
> N8EE
>
> to email directly, send to my call sign at arrl dot net
>
>
>

956. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 12:04:08 UTC
From: Kent <kaw61@yahoo.com>
Message-ID: <UNqOc.52185$6t1.26492@twister.rdc-kc.rr.com>
Source record: 91777

Due to a hard drive crashing, I am now without my filters :-((

Anyone have a "list" of their filters for import into my reader?

THANKS

"Andy in NJ" <SHORECOGS at COMCAST DOT NET> wrote in message
news:NcmdnXCI6_7kpZTcRVn-rg@comcast.com...
> "Solomon Fernblatt" <spamfree@myhome> wrote in message
> news:ypadnfGN2Y1Fr5TcRVn-tw@giganews.com...
> > I can remember back in the old days of this newsgroup, and newsgroups in
> > general, that is was actually possible to get an answer to a question
> > without things breaking out into a flame war. But it's been a long time
> > since them old days, back when we carved out antennas out of wood and
> > had to walk both ways uphill in the snow barefoot to get to our 1200
> > baud modems...
> >
> > Lets see if we can get a good fight going, just for fun.
>
> I don't see any of that BS because I've put in some nice filters. Messages
> from the known trouble makes (ie: Dan and Bruce) are automatically
deleted,
> so I don't see them. Messages containing topics known to be trouble are
also
> deleted.
>
> All that is left is good posts with helpful responses.
>
> --
> 73! de Andy KC2SSB
> http://shorecogs.tripod.com
> AIM: shorecogs
>
>

957. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 12:31:41 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <vqfkg0ldtru79nrapqn9jcve1gc95c92mp@4ax.com>
Source record: 91778

On Thu, 29 Jul 2004 17:53:39 -0700, Howard <mensch90249> wrote:

>On Thu, 29 Jul 2004 21:51:27 GMT, "H. Adam Stevens, NQ5H"
><NQ5H@ARRL.net> wrote:
>
>>
>>" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
>>news:xgeOc.2139$Jo1.1004@lakeread01...
>>>
>>> "Solomon Fernblatt" <spamfree@myhome> wrote in message
>>> news:ypadnfGN2Y1Fr5TcRVn-tw@ >
>>> > What other fighting words and phrases have I left out???
>>> >
>>> >
>>> > heehee
>>> >
>>> > SF
>>> >
>>>
>>> Conjugate Match
>>>
>>>
>>bazooka
>>
>mutual coupling

This is the teen agers' euphemisim for having sex.

958. sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 12:45:21 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410a42e4$1@news.vo.lu>
Source record: 91779

Hi,

A young reader (a CBer converted to ham, 16) sent me an email after have read my article about longwire and ask the next question.

As I haven't much experience with sloper, could some one give me some clues to help me solving his problem ?

Here is the case.
He uses a 15m long wire place to the south made of #18 AWG protected with a PVC jacket tight between a balconery close (2m) to his transmitter placed just in front of his window. The end of the sloper in attached on a fence without insulator located at the end of is garden. RTX side the antenna wire enter directly in the antenna input.

He works on 40 and 20m only and what to use the 75m also in SSB and CW. Read on an external SWR-meter, he get SWR 4:1 minimum and even almost infinite most of the time and can thus work on the air (or with at least 10W out on 100 PEP) and experiment much small electrical discharge...

Up to now I tell two things:
- For the discharge, I asked him to see this happened while transmitting or all the time. If that was while transmitting (but in all cases too of course) he has to see if his RTX was well AC grounded (to the mains ground or any plumbing system...)
- For the SWR I told him that it was due to a mismatch between the antenna impedance and the RTX and that he should use a coax longer that lambda-4, thus over 10m long to solve this (I don't speak about the Twin-Lead for transmission or the ladder line as it requires to cut the sloper in two).

Question:
This question interest me too. Is there another reason to get a very high SWR using a sloper such a way, without ground and connecting it directly to the RTX antenna jack (I think e.g. to the proximity of the house wall, the end not terminated (but looks usual) a coupling with the hosue wiring or the fence...). Is there other way to feed it excepting the coax ?
NB The inverted-V seems not to be a solution due to the too long extend of the ladder line and the V that will invade his neighbour property.

Thanks for comments

Thierry, ON4SKY
http://www.astrosurf.com/lombry

959. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 13:57:20 UTC
From: Philomena Juneslug <occasi555.nospm@wans.net>
Message-ID: <b84c6$410a53b0$d1cc5079$18663@snip.allthenewsgroups.com>
Source record: 91780
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"DSL" <retiredltNOSPAM@NOSPAMoptonline.net> wrote in message
news:V%aOc.18881$oE1.1782652@news4.srv.hcvlny.cv.net...
> Thank you for taking the time to read this.

(from alt.tasteless:)

"...you'll feel a slight pressure"

Saddam needs a urologist:

http://www.cnn.com/2004/WORLD/meast/07/29/saddam.ap/index.html

"Deposed Iraqi dictator Saddam Hussein suffers from a chronic prostate
infection and has refused to have a biopsy to rule out any chance he has
cancer, an Iraqi official said in an interview Thursday on Al-Jazeera
television."

--------- cut -------

Uhhhh, gee ... why would Saddam possibly object to a prostate biopsy if
he's having problems? Wouldn't *you* want a prostate exam from a
coalition forces doctor? Hey, I wonder if Lynndie England is available
with her big industrial rubber gloves?

Keith

960. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 14:04:01 UTC
From: Andy in NJ <"SHORECOGS at COMCAST DOT NET">
Message-ID: <CfOdnTX0c-__yJfcRVn-uw@comcast.com>
Source record: 91781

It's very easy. If you want to get rid of a majority of the BS, just add the
following filters:

From field: 'wa8ulx@aol.com' or 'w4nti@getridofthismindspring.com' (the 2
biggest spamfags around)
Subject field: 'wa8ulx', 'w4nti', 'bruce', 'brucie', 'dan', 'cbplusser',
'nocode', 'no-code', 'no code'

The newsgroups will be very different for you!

--
73! de Andy KC2SSB
http://shorecogs.tripod.com
AIM: shorecogs
"Kent" <kaw61@yahoo.com> wrote in message
news:UNqOc.52185$6t1.26492@twister.rdc-kc.rr.com...
> Due to a hard drive crashing, I am now without my filters :-((
>
> Anyone have a "list" of their filters for import into my reader?
>
> THANKS
>
>
> "Andy in NJ" <SHORECOGS at COMCAST DOT NET> wrote in message
> news:NcmdnXCI6_7kpZTcRVn-rg@comcast.com...
> > "Solomon Fernblatt" <spamfree@myhome> wrote in message
> > news:ypadnfGN2Y1Fr5TcRVn-tw@giganews.com...
> > > I can remember back in the old days of this newsgroup, and newsgroups
in
> > > general, that is was actually possible to get an answer to a question
> > > without things breaking out into a flame war. But it's been a long
time
> > > since them old days, back when we carved out antennas out of wood and
> > > had to walk both ways uphill in the snow barefoot to get to our 1200
> > > baud modems...
> > >
> > > Lets see if we can get a good fight going, just for fun.
> >
> > I don't see any of that BS because I've put in some nice filters.
Messages
> > from the known trouble makes (ie: Dan and Bruce) are automatically
> deleted,
> > so I don't see them. Messages containing topics known to be trouble are
> also
> > deleted.

> >
> > All that is left is good posts with helpful responses.
> >
> > --
> > 73! de Andy KC2SSB
> > http://shorecogs.tripod.com
> > AIM: shorecogs
> >
> >
>
>

961. S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 15:49:41 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <31rkg09gnprvh4idtll2jjdc53ghlpts43@4ax.com>
Source record: 91782
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Hi guys,

I see in Chris Bowick's book on RF circuit design, he provides 8 quite long-winded formulas for converting between S and Y parameters and vice-versa. I'm always prone to making careless errors (particularly with signs) with these kind of equations, so I was wondering if there's a simpler, graphical method for conversion using the Smith Chart. After all, that's what it was devised for - the elimination of computational errors in such calculations.
I've tried using the vastly simpler rectangular/polar co-ordinate conversion formulas, but they don't plot correctly on the Smith Chart, it seems.
So, does anyone know of a simple graphical way to do it on the SC?

Thanks,

p.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

962. Re: sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 16:40:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8ftkg0hr8vat67r6ghjpt0qg1ijjul23cg@4ax.com>
Source record: 91783

On Fri, 30 Jul 2004 14:45:21 +0200, "Thierry" <to answer direct see
http://www.astrosurf.com/lombry/post.htm> wrote:

>He uses a 15m long wire place to the south made of #18 AWG protected with a
>PVC jacket tight between a balconery close (2m) to his transmitter placed
>just in front of his window. The end of the sloper in attached on a fence
>without insulator located at the end of is garden. RTX side the antenna wire
>enter directly in the antenna input.

Hi Thierry,

Add an insulator at the fence (probably won't change anything, but
still good design).

>He works on 40 and 20m only and what [wants] to use the 75m also in SSB and CW.
>Read[ing] on an external SWR-meter, he get[s] SWR 4:1 minimum and even almost
>infinite most of the time and can thus work on the air (or with at least 10W
>out on 100 PEP) and experiment [experiences] much small electrical discharge...

Notice the harmonic relationships 20/40/80 - one or two may be a
problem for anyone.

>Up to now I tell two things:
>- For the discharge, I asked him to see this happened while transmitting or
>all the time. If that was while transmitting (but in all cases too of
>course) he has to see if his RTX was well AC grounded (to the mains ground
>or any plumbing system...)
>- For the SWR I told him that it was due to a mismatch between the antenna
>impedance and the RTX and that he should use a coax longer that lambda-4,

But he is not using any coax, right? Wire extends from rig to fence
with little room left over. So using coax does not seem to be part of
the original design, thus more coax is not an answer.

>thus over 10m long to solve this (I don't speak about the Twin-Lead for
>transmission or the ladder line as it requires to cut the sloper in two).

Adding length shifts the load Z, but will make the problem appear on
one of the other bands. Remember, you have the harmonic relationship
of 20/40/80.

The problem of arcing comes from the transmitter seeing a Hi-Z load
and for the power it is trying to put into it, the load transforms to
Hi-Voltage. Your friend's antenna runs from the transmitter's output
to the far end of the garden so there is no room for more transmission
line because there is NO transmission line in the first place.

The answer is to change the Hi-Z to a Lo-Z. Add a second wire that is 10M long. Connect it at the same point as the 15M wire at the transmitter. Hang the far end of the 10M wire at 10cM below the 15M wire. If there are still problems, add a third wire, 5M long. Hang the far end of the 5M wire at 10cM below the 10M wire.

Buy (or make) and use a tuner.

73's
Richard Clark, KB7QHC

963. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 17:21:52 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <bvednfAzaMgxHpfcRVn-og@comcast.com>
Source record: 91784

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:4ofig0toruoenemi3au67q8jk41ld040fc@4ax.com...
> Just bought the MFJ-269 antenna analyzer.
>
> Got the MFJ accessory pack, 99C, with 10 rechargeable batteries and
> the MFJ 1312D AC adaptor, which has 12 volts dc output.

Have you actually measured it? I am trickle charging a riding lawn mower battery with an AT&T 12V phone brick. Open circuit voltage is 16, and current at 14V is about 2 ma. Kept the battery charged all winter long. This is a large battery, about 20#.

> Instructions for trickle-charging batteries inside MFJ antenna
> analyzer say an external source of "at least" 13 volts is needed --
> and sez the MFJ 1315 supply will do this.

Do you have a regular 13.8V station power supply. That is more than 13, though it seems like too much to leave connected to 10 nicads for any length of time. You could use a series resistor to make the charging rate lower.

Tam/WB2TT

>
> Looked at the MFJ web site -- they seem to no longer sell the MFJ
> 1315 supply.
>
> How the hell do I charge up my batteries, using the analyzer's
> built-in trickle charger? The 1312D adaptor seems to be about a volt
> short, at 12 volts output. Anyone tried using that adaptor?
>
> Bob
> k5qwg
>
>
>

964. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 17:30:00 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <sAvOc.182470$tH1.8016496@twister.southeast.rr.com>
Source record: 91786

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:0Judnadg35REk5rcRVn-qw@comcast.com...
> OLD tech here..
>
> The original RCA Theremins used a large antenna coil below the antenna, to
> make the instrument more playable. Unfortunately, not much information
> remains, especially exactly what the theory was behind their selection of
> values.
>
> http://home.att.net/~theremin1/RCA/rca_theremin.html
>
> At 200kHz, were these antenna coils at self resonance? Near? If so, how
> far away?
>
> I'm looking to translate this to a 750-800kHz design, but I'm not sure how
> to design the coils.
> I'm considering winding the coils by putting down two strands of modern
> magnet wire, on lexan forms, then removing one strand, getting roughly the
> same winding pitch and Q as the originals.
>
>
> --
> A: Because it messes up the order in which people normally read text.
> Q: Why is top-posting such a bad thing?
> A: Top-posting.
> Q: What is the most annoying thing on usenet?
>
>
Once upon a time in the 60's I decided to build one of these things. It
rquired a home made coil with oscilator of similar freq to yours. I in my
youthful wisdom decided that instead of winding the ciol to use a couple of
coils from an old radio and just run them at different freqs. Sounds like a
good plan. Wrong. Change this parameter and you will have to redesign a
large part of the thermin mostly because the oscillator will respond much
differently to changes in hand capacitance.

965. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 17:30:04 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <BcGdnRo2T44FGJfcRVn-gQ@comcast.com>
Source record: 91785

> > >>
> > >
> > >
> > >
> > >
> > But putting two 75 ohm cables in series will only give you a longer 75
> > ohm cable.
> >
>
> if you run two of them in parallel but don't connect the center conductors
> it gives you a shielded balanced line, but what impedance??
>
>
There is a section in the ARRL Antenna book, or the Manual, that describes
how you can use 75 Ohm cable to look like 50 Ohms. As I recall, you need a
very short piece (~Lambda/4) of 50 Ohm line in there somewhere.

Tam/WB2TT

966. Re: cell phone question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 17:38:27 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <410a83e6.1457843484@news.galilei.com>
Source record: 91787

Hi Mike

I think the cellular companies have some type of small or mini cell station unit to cover dead areas.

The reason I say this is, have you ever been in a store that sells cellular phones where you DIDN'T get a full strength signal while in the store?

Yet you go outside the store and drive 1/2 mile in any direction and your back in a dead area again. It's like the store itself is a small cellular tower that exists in a known dead area.

You can find online the location of the cell towers for each service in your area, along with the known dead zones in that service area.

Find a cell store in that dead zone and you will find you have a full signal as you near the store and inside the store itself.

I Wonder Why?

The only logical answer is, they have a mini tower at the store itself!

The range of a cell phone is very short, so I was very surprised that such a service ever got off the ground in the first place. Look at the grid of towers it takes to support it!

Seems low orbit satellite would have been the better route to take!

TTUL
Gary

967. Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 17:54:09 UTC
From: John D <jawnd393@yahoo.com>
Message-ID: <5XvOc.82$UN2.3@nwrddc02.gnilink.net>
Source record: 91788

I'm a new ham and this will be used for my first antenna.

I have 97 ft of twinlead that I think might be 75 ohm but there is no
identifying label on it.
I have searched the web and can't find any information on 75 ohm twinlead.
Can anyone identify this wire from these dimensions?

Conductors about 28 AWG. (7 strand of #34 or 35) .
Separated about 1/4 inch apart.
Width overall .361" x .125 or (almost 3/8)"
Thickness overall 1/8"
Web thickness .035"
Each wire has some white insulation around it and the outer twinlead shaped
insulation is black

This wire is very light and I want to use it to feed a HF dipole with no
center support.
My maximum power is 200 watts.
John

968. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 17:54:52 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <MXvOc.84$UN2.21@nwrddc02.gnilink.net>
Source record: 91789
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
news:31rkg09gnprvh4idtll2jjdc53ghlpts43@4ax.com...
> Hi guys,
>
> I see in Chris Bowick's book on RF circuit design, he provides 8 quite
> long-winded formulas for converting between S and Y parameters and
> vice-versa. I'm always prone to making careless errors (particularly
> with signs) with these kind of equations, so I was wondering if
> there's a simpler, graphical method for conversion using the Smith
> Chart. After all, that's what it was devised for - the elimination of
> computational errors in such calculations.
> I've tried using the vastly simpler rectangular/polar co-ordinate
> conversion formulas, but they don't plot correctly on the Smith Chart,
> it seems.
> So, does anyone know of a simple graphical way to do it on the SC?
>
> Thanks,
>
> p.
> --
>
> "What is now proved was once only imagin'd." - William Blake, 1793.

Paul

I used to think I could do alot of things with Smith Charts and Z theta
Charts. I'm way out of practice, but might be able (and willing) to point
you to where you can solve the problem you now have.

Since I am not smart enough to see *exactly* whats involved with S and Y
in your post, I may be off base with this. -- Are you aware that the
admittance of an impedance can be identified by overlaying a transparent
Smith Chart over another Smith Chart with "zero" impedance overlaid on
"infinite" impedance.

Jerry

969. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 18:08:10 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <e8wOc.91$UN2.60@nwrddc02.gnilink.net>
Source record: 91790

"Arnie" <nospam@nospam.com> wrote in message
news:4109767F.5070501@nospam.com...
> Dave wrote:
>
> >just use the 75 ohm stuff in place of the 50. nothing special needed,
swr
> >only slightly affected. don't pick nits, get on the air.
> >
> >btw, parallel cables by hooking their shields and center conductors
together
> >gives you 1/2 the impedance of one alone, so two 75 ohm ones in parallel
> >give 37.5 ohms. this can be useful when building matching networks for
> >stacks of yagis or other situations where you need an impedance
transformer.
> >
> >"Dan Jacobson" <jidanni@jidanni.org> wrote in message
> >news:87zn5j1kps.fsf@jidanni.org...
> >
> >
> >>[Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
> >>ohm cable.] Recalling the way resistors and capacitors can be hooked
> >>in series or parallel, say, do parallel cables halve or double the
> >>ohms? One center lead to one side of the dipole, the other center
> >>lead to the other side of the dipole. The braids hooked together I
> >>suppose. Or, both center leads hooked to top side of dipole, both
> >>braids hooked to bottom side of dipole. All kind of combos possible.
> >>Wait, this is all a waste of cable. OK, never mind.
> >>
> >>
> >
> >
> >
> >
> But putting two 75 ohm cables in series will only give you a longer 75
> ohm cable.

Arnie

Forgive me if you are joking and I'm so dense that I take you seriously.

When only the outer conductors of two parallel coax's are connected, the
impedance between each center conductor to that junction is ~75 ohms.
Between the two center conductors the impedance will be the series of the
two unbalanced 75 ohm resulting in a 150 ohm balanced line.

Jerry

970. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 18:22:25 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <hk3lg0hdg0prirflvv2bpkshv7h5vebarj@4ax.com>
Source record: 91791

On Fri, 30 Jul 2004 13:21:52 -0400, "Tam/WB2TT"
<t-tammaru@c0mca$t.net> wrote:

>
>"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
>news:4ofig0toruoenemi3au67q8jk41ld040fc@4ax.com...
>> Just bought the MFJ-269 antenna analyzer.
>>
>> Got the MFJ accessory pack, 99C, with 10 rechargeable batteries and
>> the MFJ 1312D AC adaptor, which has 12 volts dc output.
>
>Have you actually measured it?

That's interesting -- I just measured the MFJ-1312D wall wart, which
is rated at 12 vdc/500ma -- it measures close to 18 volts. The
instructions say the 269 will operate with any voltage between 11 and
18, with 14.5v being ideal.

> I am trickle charging a riding lawn mower
>battery with an AT&T 12V phone brick. Open circuit voltage is 16, and
>current at 14V is about 2 ma. Kept the battery charged all winter long. This
>is a large battery, about 20#.
>>
>> Instructions for trickle-charging batteries inside MFJ antenna
>> analyzer say an external source of "at least" 13 volts is needed --
>> and sez the MFJ 1315 supply will do this.
>
>Do you have a regular 13.8V station power supply.

Actually, I do have a 13.8v station supply with a plug that will fit
the 269. The instructions for the 269 say the internal trickle charger
needs between 14 and 18 volts to operate properly, and no less than
13.

Looks like I actually have a couple of ways to go, in recharging the
batteries.

Bob
k5qwg

> That is more than 13,
>though it seems like too much to leave connected to 10 nicads for any length
>of time. You could use a series resistor to make the charging rate lower.
>
>Tam/WB2TT
>

>>
>> Looked at the MFJ web site -- they seem to no longer sell the MFJ
>> 1315 supply.
>>
>> How the hell do I charge up my batteries, using the analyzer's
>> built-in trickle charger? The 1312D adaptor seems to be about a volt
>> short, at 12 volts output. Anyone tried using that adaptor?
>>
>> Bob
>> k5qwg
>>
>>
>>
>

971. Re: cell phone question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 18:34:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gl564cm47cl33@corp.supernews.com>
Source record: 91792

Gary V. Deutschmann, Sr. wrote:
>. . .
> Seems low orbit satellite would have been the better route to take!

So did Motorola, about 15 years ago. It created the Iridium system, which is exactly that. It works like a cell system, except it's the cells -- the satellites -- that move. It was such a commercial failure that the subsidiary declared bankruptcy. (A 1999 commentary about its problems can be found at http://partners.nytimes.com/library/tech/99/09/biztech/articles/07iridium.html.) It was within days of bringing the satellites down when a consortium of investors bought it and have apparently made it economically viable. You can get more information at their web site, http://www.iridium.com.

Roy Lewallen, W7EL

972. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 18:53:57 UTC
From: Dave <noone@nowhere.com>
Message-ID: <xrOdnYRHBKfaBJfcRVn-qA@crocker.com>
Source record: 91793

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:e8wOc.91$UN2.60@nwrddc02.gnilink.net...
>
>
> "Arnie" <nospam@nospam.com> wrote in message
> news:4109767F.5070501@nospam.com...
> > Dave wrote:
> >
> > >just use the 75 ohm stuff in place of the 50. nothing special needed,
> swr
> > >only slightly affected. don't pick nits, get on the air.
> > >
> > >btw, parallel cables by hooking their shields and center conductors
> together
> > >gives you 1/2 the impedance of one alone, so two 75 ohm ones in
parallel
> > >give 37.5 ohms. this can be useful when building matching networks for
> > >stacks of yagis or other situations where you need an impedance
> transformer.
> > >
> > >"Dan Jacobson" <jidanni@jidanni.org> wrote in message
> > >news:87zn5j1kps.fsf@jidanni.org...
> > >
> > >
> > >>[Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
> > >>ohm cable.] Recalling the way resistors and capacitors can be hooked
> > >>in series or parallel, say, do parallel cables halve or double the
> > >>ohms? One center lead to one side of the dipole, the other center
> > >>lead to the other side of the dipole. The braids hooked together I
> > >>suppose. Or, both center leads hooked to top side of dipole, both
> > >>braids hooked to bottom side of dipole. All kind of combos possible.
> > >>Wait, this is all a waste of cable. OK, never mind.
> > >>
> > >>
> > >
> > >
> > >
> > >
> > >
> > But putting two 75 ohm cables in series will only give you a longer 75
> > ohm cable.
>
> Arnie
>
> Forgive me if you are joking and I'm so dense that I take you seriously.

>
> When only the outer conductors of two parallel coax's are connected, the
> impedance between each center conductor to that junction is ~75 ohms.
> Between the two center conductors the impedance will be the series of the
> two unbalanced 75 ohm resulting in a 150 ohm balanced line.
>

he's not joking, or maybe he is... you just don't get it.

973. Re: sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:05:24 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410a9bf7$1@news.vo.lu>
Source record: 91794

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:8ftkg0hr8vat67r6ghjpt0qg1ijjul23cg@4ax.com...
> On Fri, 30 Jul 2004 14:45:21 +0200, "Thierry" <to answer direct see
> http://www.astrosurf.com/lombry/post.htm> wrote:
>
> >He uses a 15m long wire place to the south made of #18 AWG protected with
a
> >PVC jacket tight between a balconery close (2m) to his transmitter placed
> >just in front of his window. The end of the sloper in attached on a fence
> >without insulator located at the end of is garden. RTX side the antenna
wire
> >enter directly in the antenna input.
>
> Hi Thierry,
>
> Add an insulator at the fence (probably won't change anything, but
> still good design).
>...

Hi Richard,

I like your suggestion, do it... but that 'd change anything !... ;-)
For sure I will ask him to isolate it.

> The answer is to change the Hi-Z to a Lo-Z. Add a second wire that is
> 10M long. Connect it at the same point as the 15M wire at the
> transmitter. Hang the far end of the 10M wire at 10cM below the 15M
> wire. If there are still problems, add a third wire, 5M long. Hang
> the far end of the 5M wire at 10cM below the 10M wire.

What is the principle hidden behind this additional wire ? And why 10m or
shorter ?
Does it play the same role as a lambda-4 coax to match the Z ? Strange...

I though first adding also a 2d wire, but like a dipole (instead of cuttinh
his longwire in 2 parts), and to feed it by the center using a 75-ohm
Twin-Lead (for transmission).

Does it alter the property of the longwire to feed it using a coax or a
twin-lead ? it is however a convential method isn't it ?

73
Thierry

>
> Buy (or make) and use a tuner.
>

> 73's
> Richard Clark, KB7QHC

974. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:09:57 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <3o6lg0huj7kr7uh8ia1lfgfaug1s3hudq7@4ax.com>
Source record: 91795

On Thu, 29 Jul 2004 22:02:24 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

[snip]

Kinda busy at the moment so I haven't had time to fully digest this.

That said, after a quick read I take exception to what you say below
and in the antenna notes about current "induced" in the "simulated"
coax. Unless I'm missin' something, this antenna is totally
symmetrical about the z-axis, so how current is induced is a mystery
to me. I can see where the "conducted" current comes from, you have
two wires connected end-to-end with a source on one of them. I call
this an "antenna". [g]

Later.

Wes

|I'm not sure you can extrapolate this to the problem at hand. For an
|illustration, open the EZNEC model VHFGP.ez, and add a wire from 0,0,5
|to 0,0,3.25, 40 segments. This will behave like a more-or-less worst
|case transmission line. You'll see that there's substantial current on
|the new wire, with a maximum at the top -- where it connects to the
|ground plane -- and cyclic loops of current along its length. At about
|1/4 wavelength from the top, the current is very low. Insert a load at
|that point (14% from end 1). You'll see that a low impedance at that
|point isn't transformed to a high impedance at the top of the wire. In
|fact, it doesn't matter hardly at all what impedance you insert at that
|point -- it has very little effect on the current at the top. This
|shouldn't be a surprise, since elementary circuit theory tells us we can
|insert any resistance at a point of zero current without upsetting
|anything. A resistance at the top of the wire, though, will reduce the
|current at that point.
|
|Now set the power to a constant value, say 100 watts, via the Options
|menu, and look at the power dissipated by a load inserted at the top of
|the wire (wire 6, 0% from end 1). Maximum dissipation (about 2 watts)
|occurs with a load resistance of about 100 ohms. The current at that
|point is minimized with a high resistance, although it doesn't have much
|effect on the current on the rest of the wire beyond about 1/4
|wavelength from the top. In this interesting case, you need a balun at
|an odd number of quarter wavelengths from the bottom of the wire to
|suppress the induced current, and another at the top of the wire to
|suppress the conducted current.
|

|Put a single load about a half wavelength from the top (29% from end 1),
|at one of the current maxima. You'll find that you can get up to nearly
|6 watts dissipation in the load (seen by clicking Load Dat) by varying
|the load resistance, with the maximum at about 100 ohms. If you add a
|second load at the next current maximum down (57% from end 1), you can
|get over 6 watts total dissipation in the loads by making each load 50
|ohms. And at that, they do a poor job of suppressing the current. This
|is a very crude example of a poorly designed "distributed balun", where
|the dissipation is high and the current suppression poor.
|
|Now, the amount of dissipation illustrated here is insignificant in
|terms of signal strength loss, and I suspect that this is usually true.
|That is, even a poorly designed and/or placed resistive balun is
|unlikely to cost you any signal strength. But the dissipation can easily
|produce unacceptable heating of the balun. Also, the fact that the
|current is high enough at the balun location to cause substantial
|dissipation means that the balun isn't doing its job as it should -- the
|whole purpose is to reduce the current to a low value.
|
|Roy Lewallen, W7EL

975. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:11:11 UTC
From: John Larkin <jjlarkin@highSNIPlandTHIStechPLEASEnology.com>
Message-ID: <667lg0dtt8m6fb7s7l565dte545smsp4ju@4ax.com>
Source record: 91796
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 16:49:41 +0100, Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote:

>Hi guys,
>
>I see in Chris Bowick's book on RF circuit design, he provides 8 quite
>long-winded formulas for converting between S and Y parameters and
>vice-versa. I'm always prone to making careless errors (particularly
>with signs) with these kind of equations, so I was wondering if
>there's a simpler, graphical method for conversion using the Smith
>Chart. After all, that's what it was devised for - the elimination of
>computational errors in such calculations.
>I've tried using the vastly simpler rectangular/polar co-ordinate
>conversion formulas, but they don't plot correctly on the Smith Chart,
>it seems.
>So, does anyone know of a simple graphical way to do it on the SC?
>
>Thanks,
>
>p.

You could write a little Basic program or an Excel atrocity.

John

976. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:14:22 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <yeadnV8KhviXA5fcRVn-oA@comcast.com>
Source record: 91797

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:nafOc.1890$Jp6.1229@newsread3.news.atl.earthlink.net...
>
> "J999w" <j999w@aol.com> wrote in message
> news:20040729023657.13589.00002396@mb-m12.aol.com...
> > >The Cushcraft 5 elements were very poor performers for the length.
> > >
> > Hmmmm, could be why I'm only at 150 grids and 8 countries since April
> running
> > 80 watts with my Cushcraft 5 el at 35 ft.
> > >
>
> When 6 meters is open it does not take much of an antenna. The first
> contact I made on 6 with a transverter I just finished was from North
> Carolina to Canada using about 10 watts to a trapped dipole cut for 40 to
10
> meters. It was the only antenna I had up for anything lower than 2 meters
> and I just wanted to see if I could hear anything on the transverter. I
> bought a 5 element CC because I just read the end of the box and it said
50
> to 54 mhz. I did not take time to see that it could only be tuned for
about
> a mhz or two before the swr went way too high. I later extended the
boom
> from about 12 feet to 16 feet and it made a noticiable differance on the
> signals when there was no skip.
>
> As usual CC puts too many elements on too short of a boom.
>
>
Takes less than that. My first 6m contact, other than locals was from W2 to
W0 using a 1/4 wave vertical hanging from a curtain rod in the apartment.
Ground was the hot water radiator.

Tam/WB2TT

977. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:39:51 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <pt8lg0ttrum857sl2o7nlnj1tvg8gkk1hp@4ax.com>
Source record: 91798

On Thu, 29 Jul 2004 16:21:29 -0500, "Crazy George" <muNnscOh@attSglPobaAl.nMet>
wrote:

>Why, he reverses the direction of the Poynting Vector. I thought everyone
>knew that. Goes into the "antenna" instead of out.

No, George, I didn't get the Poynt of that. Iinstead, I always wondered why my
EH antennas got hot with no signal radiated, while Ted's EH antenna radiated 6
dB more than my standard dipole.

Thanks for straightening me out.

Walt, W2DU

978. Re: Asking for help with designing a VHF balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:42:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gl94tiietr446@corp.supernews.com>
Source record: 91799

You are missing something. The added wire is collinear with both the vertical radiating element and the vertical component of the ground plane radials. There's finite mutual impedance between collinear conductors, hence mutual coupling. If you need proof, change the coordinate of the top of the added wire to disconnect it from the antenna and run the simulation. You'll get maximum current on the added wire when it's approximately an integer multiple of a half wavelength long.

A feedline placed symmetrically with respect to a conventional dipole doesn't have any net induced current because the coupling from each half of the dipole is equal and opposite to the coupling from the other half. That's not the case with the ground plane example, where the coupling from the vertical wire is different in magnitude and not opposite to the coupling from the radials.

Roy Lewallen, W7EL

Wes Stewart wrote:
> On Thu, 29 Jul 2004 22:02:24 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> [snip]
>
> Kinda busy at the moment so I haven't had time to fully digest this.
>
> That said, after a quick read I take exception to what you say below
> and in the antenna notes about current "induced" in the "simulated"
> coax. Unless I'm missin' something, this antenna is totally
> symmetrical about the z-axis, so how current is induced is a mystery
> to me. I can see where the "conducted" current comes from, you have
> two wires connected end-to-end with a source on one of them. I call
> this an "antenna". [g]
>
> Later.
>
> Wes

979. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:45:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gl9bij490dd99@corp.supernews.com>
Source record: 91800

Sorry, I should have mentioned that. Most wall warts are poorly regulated, so one that's rated at 12 volts will commonly produce higher voltage at lower than its rated current, and anywhere from 15 to 18 volts open circuit. So a 12 volt wall wart with current rating well above what you'll be drawing (70-100 mA for a 15 hour AA NiCd charger) should work fine.

Roy Lewallen, W7EL

Bob Miller wrote:

> . . .
> That's interesting -- I just measured the MFJ-1312D wall wart, which
> is rated at 12 vdc/500ma -- it measures close to 18 volts. The
> instructions say the 269 will operate with any voltage between 11 and
> 18, with 14.5v being ideal. . .

980. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:48:15 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <fb9lg0l4ujqtk6bie1vfe4nv2nbltf6lbs@4ax.com>
Source record: 91801

On Fri, 30 Jul 2004 19:39:51 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On Thu, 29 Jul 2004 16:21:29 -0500, "Crazy George" <muNnscOh@attSglPobaAl.nMet>
>wrote:
>
>>Why, he reverses the direction of the Poynting Vector. I thought everyone
>>knew that. Goes into the "antenna" instead of out.
>
>No, George, I didn't get the Poynt of that. Iinstead, I always wondered why my
>EH antennas got hot with no signal radiated, while Ted's EH antenna radiated 6
>dB more than my standard dipole.
>
>Thanks for straightening me out.
>
>Walt, W2DU

George, I replied to your msg, but it came back. It didn't like the email
address on your mail when I hit the 'reply' button. Wha' hoppan?

Walt

981. Re: sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:55:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4c9lg0t640ap2hpbcffe45gp9tp9edrj34@4ax.com>
Source record: 91802

On Fri, 30 Jul 2004 21:05:24 +0200, "Thierry" <to answer direct see
http://www.astrosurf.com/lombry/post.htm> wrote:

>What is the principle hidden behind this additional wire ? And why 10m or
>shorter ?
>Does it play the same role as a lambda-4 coax to match the Z ? Strange...

Hi Thierry,

Think about it. You have a Hi-Z antenna at 15M. You have a lower-Z
antenna at 10M (or 5M). What is Hi-Z in parallel with Low-Z?

This is called a "Fan" design (because the wires are spread out like a
japanese fan to keep the wires apart - it doesn't take much). With a
"Fan" design, the frequency driving all the wires will guarantee one
wire will be Low-Z and the power will go there because this Low-Z wire
"shorts" out the others.

>Does it alter the property of the longwire to feed it using a coax or a
>twin-lead ?

No. An antenna is an antenna, a transmission line is a transmission
line. Together they are a system. Yes, you are changing the system,
but the parts remain working in their own functions. When you change
the system by altering a part, the system response changes (Z). The
antenna still radiates (and the transmission line should not - unless
something is broken).

> it is however a convential method isn't it ?

Conventional yes, but your friend is not doing conventional.

73's
Richard Clark, KB7QHC

982. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 19:59:36 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <c3alg055jptec5u2ff98vv8q5n9gpija87@4ax.com>
Source record: 91805
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 17:54:52 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
>
>
>
>
>"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
>news:31rkg09gnprvh4idtll2jjdc53ghlpts43@4ax.com...
>> Hi guys,
>>
>> I see in Chris Bowick's book on RF circuit design, he provides 8 quite
>> long-winded formulas for converting between S and Y parameters and
>> vice-versa. I'm always prone to making careless errors (particularly
>> with signs) with these kind of equations, so I was wondering if
>> there's a simpler, graphical method for conversion using the Smith
>> Chart. After all, that's what it was devised for - the elimination of
>> computational errors in such calculations.
>> I've tried using the vastly simpler rectangular/polar co-ordinate
>> conversion formulas, but they don't plot correctly on the Smith Chart,
>> it seems.
>> So, does anyone know of a simple graphical way to do it on the SC?
>>
>> Thanks,
>>
>> p.
>> --
>>
>> "What is now proved was once only imagin'd." - William Blake, 1793.
>
> Paul
>
> I used to think I could do alot of things with Smith Charts and Z theta
>Charts. I'm way out of practice, but might be able (and willing) to point
>you to where you can solve the problem you now have.
>
> Since I am not smart enough to see *exactly* whats involved with S and Y
>in your post, I may be off base with this. -- Are you aware that the
>admittance of an impedance can be identified by overlaying a transparent
>Smith Chart over another Smith Chart with "zero" impedance overlaid on
>"infinite" impedance.
>

> Jerry
>

It's been a long time since I've used a Smith Chart, but the overlay
method is what I seem to remember as well.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

983. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 20:05:15 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%RxOc.132$%e2.81@nwrddc04.gnilink.net>
Source record: 91803

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:f23jg0dc86d6mdfsm844ab77p98qvsquo2@4ax.com...
> On Thu, 29 Jul 2004 12:43:06 -0700, Roy Lewallen <w7el@eznec.com>
> wrote:
>
> >I've seen a selection of "wall warts" at just about every flea market
> >I've been to, and have added quite a few to my collection from various
> >defunct and obsolete pieces of equipment. A lot of them put out 15 volts
> >or so DC at a couple of hundred mA, which is what you need. If you don't
> >want to wait for the next flea market, try Radio Shack or a radio or
> >computer parts store like Fry's, or eBay. You might have to replace the
> >connector with a compatible one, and be sure the polarity is correct.
> >
> >Roy Lewallen, W7EL
>
> ... thanks, Roy...
>
> bob
> k5qwg
>

Bob

If you decide to mahe your own charger, you might want to consider using a
light bulb in series with the voltage source. That can be a way of limiting
charging current.

Since I dont know what kind of batteries are being charged, it is
incorrect for me to advise anything about the charger.

Jerry

984. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 20:05:42 UTC
From: Glen Overby <coreSPAMsample@charter.net>
Message-ID: <10glagmj50mss61@corp.supernews.com>
Source record: 91804

Bob Miller <bxmillerNoSpam@texas.net> wrote:
>How the hell do I charge up my batteries, using the analyzer's
>built-in trickle charger? The 1312D adaptor seems to be about a volt
>short, at 12 volts output. Anyone tried using that adaptor?

I didn't buy the MFJ power supply. Instead, I found a compatible power
connector at Radio Shack and made a pigtail with power poles at the other end.
To charge the analizer, I plug it into the rigrunner that powers my radios.

Glen, KC0IYT

985. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 20:31:25 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <xeyOc.199056$JR4.130570@attbi_s54>
Source record: 91806

But Ted is not going to fight you .So as a notable fighting man looking for
a fight
you will have to go along and accept the next person that the group decides
to pick on.
After all there is some safety in numbers when there is a bonding
of the those who wish to harass a individual.
Be patient, the record shows Richard is never at a loss to find somebody to
drop
his fractured english upon
Art

"Walter Maxwell" <w2du@iag.net> wrote in message
news:pt8lg0ttrum857sl2o7nlnj1tvg8gkk1hp@4ax.com...
> On Thu, 29 Jul 2004 16:21:29 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet>
> wrote:
>
> >Why, he reverses the direction of the Poynting Vector. I thought
everyone
> >knew that. Goes into the "antenna" instead of out.
>
> No, George, I didn't get the Poynt of that. Iinstead, I always wondered
why my
> EH antennas got hot with no signal radiated, while Ted's EH antenna
radiated 6
> dB more than my standard dipole.
>
> Thanks for straightening me out.
>
> Walt, W2DU
>

986. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 20:36:16 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <4jyOc.854$QA5.48@nwrddc01.gnilink.net>
Source record: 91807
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

"Jim Thompson" <thegreatone@example.com> wrote in message
news:c3alg055jptec5u2ff98vv8q5n9gpija87@4ax.com...
> On Fri, 30 Jul 2004 17:54:52 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> >
> >
> >
> >
> >
> >"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
> >news:31rkg09gnprvh4idtll2jjdc53ghlpts43@4ax.com...
> >> Hi guys,
> >>
> >> I see in Chris Bowick's book on RF circuit design, he provides 8 quite
> >> long-winded formulas for converting between S and Y parameters and
> >> vice-versa. I'm always prone to making careless errors (particularly
> >> with signs) with these kind of equations, so I was wondering if
> >> there's a simpler, graphical method for conversion using the Smith
> >> Chart. After all, that's what it was devised for - the elimination of
> >> computational errors in such calculations.
> >> I've tried using the vastly simpler rectangular/polar co-ordinate
> >> conversion formulas, but they don't plot correctly on the Smith Chart,
> >> it seems.
> >> So, does anyone know of a simple graphical way to do it on the SC?
> >>
> >> Thanks,
> >>
> >> p.
> >> --
> >>
> >> "What is now proved was once only imagin'd." - William Blake, 1793.
> >
> > Paul
> >
> > I used to think I could do alot of things with Smith Charts and Z theta
> >Charts. I'm way out of practice, but might be able (and willing) to
point
> >you to where you can solve the problem you now have.
> >
> > Since I am not smart enough to see *exactly* whats involved with S and
Y
> >in your post, I may be off base with this. -- Are you aware that the

> >admittance of an impedance can be identified by overlaying a transparent
> >Smith Chart over another Smith Chart with "zero" impedance overlaid on
> >"infinite" impedance.
> >
> > Jerry
> >
>
> It's been a long time since I've used a Smith Chart, but the overlay
> method is what I seem to remember as well.
>
> ...Jim Thompson
> --
> | James E.Thompson, P.E. | mens |
> | Analog Innovations, Inc. | et |
> | Analog/Mixed-Signal ASIC's and Discrete Systems | manus |
> | Phoenix, Arizona Voice:(480)460-2350 | |
> | E-mail Address at Website Fax:(480)460-2142 | Brass Rat |
> | http://www.analog-innovations.com | 1962 |
>
> I love to cook with wine. Sometimes I even put it in the food.

Jim

I'm kinda embarressed to admit that I'm not even sure what Y and S refers to. I do remember that impedances plotted on a Smith Chart will follow the lines of constant "conductance" on the transparent overlay. Maybe thats too fundamental for inclusion in this thread. But, it sure is a quick way of predicting how much shunt Xl or Xc is needed to "tune" to a more desireable impedance.

Jerry

987. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 20:37:17 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <410ab3b0_4@news1.prserv.net>
Source record: 91808

Walt:
See the signature block for instructions. The address is munged to foil address harvesters. Or send it to W5VPQ at arrl dot net

By the way, I find it very interesting that apparently I am the only one who recalls seeing that thing originally written up in Wireless World many, many years ago. It peaked, then disappeared for 10 or 15 years until the recent flap.
--
Crazy George
Remove N O and S P A M imbedded in return address
"Walter Maxwell" <w2du@iag.net> wrote in message
news:fb9lg0l4ujqtk6bie1vfe4nv2nbltf6lbs@4ax.com...
> On Fri, 30 Jul 2004 19:39:51 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
> >On Thu, 29 Jul 2004 16:21:29 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet>
> >wrote:
> >
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everyone
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> >EH antennas got hot with no signal radiated, while Ted's EH antenna
radiated 6
> >dB more than my standard dipole.
> >
> >Thanks for straightening me out.
> >
> >Walt, W2DU
>
> George, I replied to your msg, but it came back. It didn't like the email
> address on your mail when I hit the 'reply' button. Wha' hoppan?
>
> Walt
>

988. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 20:44:57 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1mli6dxwe59yz$.dlg@news.individual.net>
Source record: 91809
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 12:59:36 -0700, Jim Thompson wrote:

> On Fri, 30 Jul 2004 17:54:52 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>>
>>
>>
>>
>>
>>"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
>>news:31rkg09gnprvh4idtll2jjdc53ghlpts43@4ax.com...
>>> Hi guys,
>>>
>>> I see in Chris Bowick's book on RF circuit design, he provides 8 quite
>>> long-winded formulas for converting between S and Y parameters and
>>> vice-versa. I'm always prone to making careless errors (particularly
>>> with signs) with these kind of equations, so I was wondering if
>>> there's a simpler, graphical method for conversion using the Smith
>>> Chart. After all, that's what it was devised for - the elimination of
>>> computational errors in such calculations.
>>> I've tried using the vastly simpler rectangular/polar co-ordinate
>>> conversion formulas, but they don't plot correctly on the Smith Chart,
>>> it seems.
>>> So, does anyone know of a simple graphical way to do it on the SC?
>>>
>>> Thanks,
>>>
>>> p.
>>> --
>>>
>>> "What is now proved was once only imagin'd." - William Blake, 1793.
>>
>> Paul
>>
>> I used to think I could do alot of things with Smith Charts and Z theta
>>Charts. I'm way out of practice, but might be able (and willing) to point
>>you to where you can solve the problem you now have.
>>
>> Since I am not smart enough to see *exactly* whats involved with S and Y
>>in your post, I may be off base with this. -- Are you aware that the
>>admittance of an impedance can be identified by overlaying a transparent
>>Smith Chart over another Smith Chart with "zero" impedance overlaid on

>>"infinite" impedance.
>>
>> Jerry
>>
>
> It's been a long time since I've used a Smith Chart, but the overlay
> method is what I seem to remember as well.
>
> ...Jim Thompson

Yup and you can get one with the admittance chart already overlaid
on the impedance chart. any point plotted can be read either way and
the s-params are also directly read from either with dividers or a
ruler.

I have no clue why Paul is converting between rectangular and polar
and replotting. The point should stay put.
--
Best Regards,
Mike

989. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 21:32:04 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <k2flg05dg83q9vhr08gphfq95lfs9p3f71@4ax.com>
Source record: 91810
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 12:11:11 -0700, John Larkin
<jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:

>You could write a little Basic program or an Excel atrocity.

Indeed. And that is something I've considered. But The way Bowick
explains it, it *ought* to be possible to perform the conversion
summarily by a simple graphical method. Unfortunately, the
arithmetical method he describes only works for linear polar charts,
which of course the SC certainly isn't linear!
And the guy who suggested the 180' rotation: I reckon that's *part* of
the solution, but simply doing this alone merely converts impedances
to admittances. S-params are typically denoted in the form x+/-yj
whereas the Y-params are denoted as vector and angular co-ordinates,
so further mappings and/or translations are required following any
rotation...
Still, I'm sure someone out there will know. :-/
--

"What is now proved was once only imagin'd." - William Blake, 1793.

990. Re: Halle Berry naked

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 21:37:28 UTC
From: wolfofdiamonds@yahoo.com
Message-ID: <23c378db.0407301337.3837f52d@posting.google.com>
Source record: 91811
Cross-posted to: japan.app.postpet,hannover.fundgrube,alt.military.police,alt.engr.dynamics,rec.radio.amateur.antenna,rec.arts.sf.movies,han.soc.culture.chejudo,es.humanidades.gramatica

tomorrowthanyouthink@yahoo.com (Tamara) wrote in message news:<d8f1a7ac.0407291409.76d30434@posting.google.com>...
> "Dr. Daffodil Swain" <wa4jm@earthlink.net> wrote in message news:<jxLNc.16774$iK.12022@newsread2.news.atl.earthlink.net>...
> > > Halle Berry naked Halle Berry naked Halle Berry naked Halle Berry naked
> > >
> > >
> > >Who cares.
> > >
> > >
>
> & she's narcisstic ruining her .all over.andmoreagain.Gimme Dolly Parton.T

she's far more sexy clothed and with an ego reductiion.not for me.JJ

991. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:04:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <wBzOc.241$%e2.74@nwrddc04.gnilink.net>
Source record: 91812
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
news:k2flg05dg83q9vhr08gphfq95lfs9p3f71@4ax.com...
> On Fri, 30 Jul 2004 12:11:11 -0700, John Larkin
> <jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:
>
> >You could write a little Basic program or an Excel atrocity.
>
> Indeed. And that is something I've considered. But The way Bowick
> explains it, it *ought* to be possible to perform the conversion
> summarily by a simple graphical method. Unfortunately, the
> arithmetical method he describes only works for linear polar charts,
> which of course the SC certainly isn't linear!
> And the guy who suggested the 180' rotation: I reckon that's *part* of
> the solution, but simply doing this alone merely converts impedances
> to admittances. S-params are typically denoted in the form x+/-yj
> whereas the Y-params are denoted as vector and angular co-ordinates,
> so further mappings and/or translations are required following any
> rotation...
> Still, I'm sure someone out there will know. :-/
> --
>
> "What is now proved was once only imagin'd." - William Blake, 1793.

Paul

I realize that I dont understand what needs to be done. I'm just too far
out of touch with technology. But, is there any chance that a Ztheta Chart
overlay would be of any assistance?? Properly used, the combination of
Smith and Ztheta can be a usefull tool. That overlay provides the impedance
magnitude with its angle, at a glance, for all R+/- j X.

Jerry

Jerry

992. Re: sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:24:19 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <nUzOc.17510$fm2.8472@lakeread02>
Source record: 91813

"Richard Clark" wrote

> Think about it. You have a Hi-Z antenna at 15M. You have a lower-Z
> antenna at 10M (or 5M). What is Hi-Z in parallel with Low-Z?
>
> This is called a "Fan" design (because the wires are spread out like a
> japanese fan to keep the wires apart - it doesn't take much). With a
> "Fan" design, the frequency driving all the wires will guarantee one
> wire will be Low-Z and the power will go there because this Low-Z wire
> "shorts" out the others.

Hi Richard, I use a fan-design on one of my "long wire" antennas (which is fed from the ground-end across 1/2 of a 4:1 current balun, other half is grounded, an arguably less noisy design but it does work). And I'm about to add another, which an ATU will assist across 2-16mhz.

My question is, do you recommend a particular method of joining the "fan" ends together at the balun? Twisting them together in a haphazard fashion with a doping of solder and coax-seal might be electrically inferior to a splice or other connector design. Any thoughts?

73'

Jack Painter
Virginia Beach VA

993. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:35:37 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <cfGdnZvpvd66UJfcRVn-uw@comcast.com>
Source record: 91814

> Once upon a time in the 60's I decided to build one of these things. It
> rquired a home made coil with oscilator of similar freq to yours. I in my
> youthful wisdom decided that instead of winding the ciol to use a couple
of
> coils from an old radio and just run them at different freqs. Sounds like
a
> good plan. Wrong. Change this parameter and you will have to redesign a
> large part of the thermin mostly because the oscillator will respond much
> differently to changes in hand capacitance.

That's what I'm finding. Things that I never expected to matter, do.
Even the shape of the antenna matters!

994. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:38:17 UTC
From: jgboyles@aol.com
Message-ID: <20040730183817.22153.00000788@mb-m07.aol.com>
Source record: 91815

>So, does anyone know of a simple graphical way to do it on the SC?

Yes, do a Google search on "Smith Chart" and you can get several freeware or demo versions of the Chart that will do exactly what you want. I use a demo version of a Smith Chart program that is amazing. Very easy to use and it is free. Look around, it is out there.
73 Gary N4AST

995. Re: Screwdriver antennas--Opinions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:49:39 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <9gAOc.506$x91.439@bignews5.bellsouth.net>
Source record: 91816

```
"Jon" <jon@portlandbill.co.uk> wrote in message
news:cebvm2$uv9$3@news7.svr.pol.co.uk...
> Jerry
>
> This link does not work, please can you re-post it.
>
> Jon
>
>
> "Jerry" <joxendi@bellsouth.net> wrote in message
> news:62jNc.21114$%S4.348@bignews1.bellsouth.net...
> >
> > "Da Shadow" <DAS@cat.net> wrote in message
> > news:q88Nc.390$wz.205@fed1read01...
> > >
> > > Yo Shadow 998 -- Da Shadow here
> > > Have you looked at eHam reviews -- lots of opinions and mobile
antennas
> > > there
> > > http://www.eham.net/reviews/products/12
> > > --
> > > Lamont Cranston
> > >
> > > The Shadow Knows
> > > ----------------------
> > > "Shadow 998" <hrd998cc@nospam.yahoo.com> wrote in message
> > > news:aY6Nc.2664$AY5.1601@newssvr21.news.prodigy.com...
> > > > I am very close to testing for my general ticket thanks to Gordon
> West's
> > > > morse cassettes. I want to get an HF screwdriver antenna for my
> mobile
> > in
> > > > anticipation of adding /AG to my call and am looking for
> > > > opinions/suggestions on manufacturers. What are the pros and cons?
> Do
> > > you
> > > > have a favorite? Best place to buy?
> > > >
> > > > Thanks for the input.
> > > >
> > > > Russ KG6TDX
> >
> > While you are at it, please take a look at www.qrz.com.k4kwh . It is a
> > product at a reasonable price and will serve you well.
```

> >
> > 73
> >
> > Jerry

AAAACK! My Bad! The link is www.qsl.net/k4kwh

Mea Culpa! (I had just come from QRZ and guess I still had that on my mind

> > > >
> > > >
> > >
> > >
> >
> >
>
>

996. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:52:22 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <isjlg0p10gtk7nr4poto878il3rf7ojj7k@4ax.com>
Source record: 91817
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 22:04:12 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> Paul
>
> I realize that I dont understand what needs to be done. I'm just too far
>out of touch with technology. But, is there any chance that a Ztheta Chart
>overlay would be of any assistance?? Properly used, the combination of
>Smith and Ztheta can be a usefull tool. That overlay provides the impedance
>magnitude with its angle, at a glance, for all R+/- j X.

Jerry, I appreciate your tip. But that's not actually what I'm trying
to ascertain. The complete SC is hard enough to read as it is without
overlaying a spherical grid on it! Your idea might well work, don't
get me wrong, but I just need to know if S-Y mappings can be carried
out with the Smith Chart *alone.*

Thanks,

Paul
--

"What is now proved was once only imagin'd." - William Blake, 1793.

997. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 22:53:28 UTC
From: j999w@aol.com
Message-ID: <20040730185328.29990.00000696@mb-m10.aol.com>
Source record: 91818

So the message I'm reading is that Cushcraft antenna's are no more than a wet noodle.

How much percentage increase in QSL's in the box would one expect to expect by changing from a Cushcraft to a computerized optimal yagi of your choice of the same boom length, same height, same feedline, etc?

After all, Q's in the book is what it all boils down to. If one works say 100 grid squares in 6 months, could you expect to work 110 grids (10% increase) ? 125 grids?

I know I sure could use more front to back ratio ... those EN67 guys are really making it hard for me to get those last grids in FL !

jw
k9rzz
(I don't know why I bother)

998. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:01:13 UTC
From: John Larkin <jjlarkin@highSNIPlandTHIStechPLEASEnology.com>
Message-ID: <hhklg0d1e3fecafd6umjb9sq7g7retbqu7@4ax.com>
Source record: 91819
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 22:32:04 +0100, Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote:

>On Fri, 30 Jul 2004 12:11:11 -0700, John Larkin
><jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:
>
>>You could write a little Basic program or an Excel atrocity.
>
>Indeed. And that is something I've considered. But The way Bowick
>explains it, it *ought* to be possible to perform the conversion
>summarily by a simple graphical method. Unfortunately, the
>arithmetical method he describes only works for linear polar charts,
>which of course the SC certainly isn't linear!
>And the guy who suggested the 180' rotation: I reckon that's *part* of
>the solution, but simply doing this alone merely converts impedances
>to admittances. S-params are typically denoted in the form x+/-yj
>whereas the Y-params are denoted as vector and angular co-ordinates,
>so further mappings and/or translations are required following any
>rotation...
>Still, I'm sure someone out there will know. :-/

Semiconductor s-params are usually listed as magnitude and angle, with
the mag sometimes in pure scalar form, or sometimes in dB. A universal
conversion program would be nice, espacially if it included equivalent
reactance, capacitance, inductance, stuff like that.

John

999. Re: sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:01:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <87klg0l2klp0j0ujquvr3t100ftu9ej8ov@4ax.com>
Source record: 91820

On Fri, 30 Jul 2004 18:24:19 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>My question is, do you recommend a particular method of joining the "fan"
>ends together at the balun? Twisting them together in a haphazard fashion
>with a doping of solder and coax-seal might be electrically inferior to a
>splice or other connector design. Any thoughts?

Hi Jack,

Joins of metal should always be bright to bright metal. Pressure on
joins will break the oxide coating, but a relaxing join obviously
allows corrosion. Hence you solder. Solder is a sealant, not a
mechanical splice. If you can guarantee the pressure (like using a
household AC splice or automotive splices), you can tape it, or use
coax-seal. Make sure that tension of hanging does not weaken the
pressure seal because metals will flow. Aluminum has a habit of what
is called cold flow, it relaxes from the installation pressure. You
need industrial splices for them. Also, dissimilar metals will
corrode through cathodic potentials (reduction). There are also
industrial splices for dissimilar metals.

The sturdiest mechanical splice is called the "Western Union Splice"
use a search engine for illustrations.

73's
Richard Clark, KB7QHC

1000. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:17:18 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <410ad6ff$0$74187$39cecf19@news.twtelecom.net>
Source record: 91721

J999w wrote:

> So the message I'm reading is that Cushcraft antenna's are no more than a wet
> noodle.
>
> How much percentage increase in QSL's in the box would one expect to expect by
> changing from a Cushcraft to a computerized optimal yagi of your choice of the
> same boom length, same height, same feedline, etc?
>
> After all, Q's in the book is what it all boils down to. If one works say 100
> grid squares in 6 months, could you expect to work 110 grids (10% increase) ?
> 125 grids?
>
> I know I sure could use more front to back ratio ... those EN67 guys are really
> making it hard for me to get those last grids in FL !
>
> jw
> k9rzz
> (I don't know why I bother)

I can't give you hard numbers, but often it's standing out in the pileup
just that little bit more that counts; you get that Q done sooner, and
can move on to the next grid you need sooner. Also a better pattern and
gain will let you hear better a lot of the time. And when running weak
tropo, and extra 2 dB gain can make the contact you would have lost. In
the short run not a great difference, perhaps, but in the long run it's
extra Qs, Especially valuable in a contest.

tom
K0TAR

1001. Re: sloper question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:17:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <hGAOc.17598$fm2.14222@lakeread02>
Source record: 91722

"Richard Clark" wrote
> The sturdiest mechanical splice is called the "Western Union Splice"
> use a search engine for illustrations.

Thanks Richard, that's what I was looking for!

The best illustration I found was:
http://www.tpub.com/content/neets/14176/css/14176_46.htm

Other good and proper splicing info (illustrated):
http://workmanship.nasa.gov/lib/insp/2%20books/links/sections/407%20Splices.html

Thanks again,

Jack

1002. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:28:17 UTC
From: jgboyles@aol.com
Message-ID: <20040730192817.22153.00000794@mb-m07.aol.com>
Source record: 91723

>Conductors about 28 AWG. (7 strand of #34 or 35) .
>Separated about 1/4 inch apart.
>Width overall .361" x .125 or (almost 3/8)"
>Thickness overall 1/8"
>Web thickness .035"

The ARRL Antenna book says the Zo of a two wire line is Zo=276 log (2S/d) ohms.
S is the center-to center wire spacing, and d is the diameter of the wire plus
insulation. Sorry I don't have the time to calculate your Zo, maybe later.
73 Gary N4AST

1003. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:29:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10glmf6regc7re4@corp.supernews.com>
Source record: 91724
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I sense some confusion about s and y parameters. S parameters aren't impedances -- they're dimensionless transmission or reflection coefficients. They do have a real and imaginary part (or magnitude and angle) like an impedance, but that's as far as the similarity goes. You can overlay a Smith chart on a polar plot of reflection coefficient (e.g., s11) and directly read the normalized impedance which causes that reflection coefficient. But what you read from the Smith chart isn't the the reflection coefficient -- that is, it's not the s parameter. When you reverse the Smith chart, you get the admittance causing the reflection coefficient, but this still isn't a y parameter. If you invert an s parameter, you still have a dimensionless number.

Y (admittance) parameters are a different critter, are measured differently than s parameters, and have the dimensions of admittance. Transformation from s to y or vice-versa isn't simple. For example,

y11 = {[(1 - s11)(1 + s22) + s12s21] / [(1 + s11)(1 + s22) - s12s21]}/Z0

(See, for example, Gonzalez, _Microwave Transistor Amplifiers, Analysis and Design_.) From this you can see that in order to find y11, you not only have to know s11, but also s12, s21, and s22. So it's simply not possible to convert from y11 to s11 if s11 is all you know.

Roy Lewallen, W7EL

1004. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-30 23:42:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gln6sh67uf474@corp.supernews.com>
Source record: 91725

JGBOYLES wrote:

>>Conductors about 28 AWG. (7 strand of #34 or 35) .
>>Separated about 1/4 inch apart.
>>Width overall .361" x .125 or (almost 3/8)"
>>Thickness overall 1/8"
>>Web thickness .035"
>
>
> The ARRL Antenna book says the Zo of a two wire line is Zo=276 log (2S/d) ohms.
> S is the center-to center wire spacing, and d is the diameter of the wire plus
> insulation. Sorry I don't have the time to calculate your Zo, maybe later.
> 73 Gary N4AST

d is the diameter of the wire, period. The formula is for a line with no insulation. If the whole electric field is in the dielectric (as it is in coax), the impedance is modified by a factor 1/sqrt(erel) where erel is the relative permittivity (dielectric constant) of the insulation. 1/sqrt(erel) also happens to be the velocity factor in a line where the entire field is in the dielectric. For polyethylene, 1/sqrt(erel) is about 0.66, so the characteristic impedance of twinlead line with polyethylene insulation between conductors (where some but not all the field is in the dielectric) is somewhere between the value calculated from the formula and 0.66 times that value. You can measure the velocity factor by a number of methods. If you know the velocity factor, the impedance is the formula value times the velocity factor.

Roy Lewallen, W7EL

1005. AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 00:36:00 UTC
From: Robert and Karen Gilland <rjk1996@optushome.com.au>
Message-ID: <410ae907$0$29446$afc38c87@news.optusnet.com.au>
Source record: 91726

I want a simple AM Antenna to connect to my hi-fi system.
I really like AM but I cannot access it at the moment.

Does anyone know where I could get an AM Antenna for a Hi-Fi in Australia

Regards,

Robert.

1006. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 00:43:49 UTC
From: Howard <mensch90249>
Message-ID: <foqlg0h2ndc8cmne950grvfam0e77th2hq@4ax.com>
Source record: 91727

On Fri, 30 Jul 2004 12:31:41 GMT, Walter Maxwell <w2du@iag.net> wrote:

>On Thu, 29 Jul 2004 17:53:39 -0700, Howard <mensch90249> wrote:
>
>>On Thu, 29 Jul 2004 21:51:27 GMT, "H. Adam Stevens, NQ5H"
>><NQ5H@ARRL.net> wrote:
>>
>>>
>>>" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
>>>news:xgeOc.2139$Jo1.1004@lakeread01...
>>>>
>>>> "Solomon Fernblatt" <spamfree@myhome> wrote in message
>>>> news:ypadnfGN2Y1Fr5TcRVn-tw@ >
>>>> > What other fighting words and phrases have I left out???
>>>> >
>>>> >
>>>> > heehee
>>>> >
>>>> > SF
>>>> >
>>>>
>>>> Conjugate Match
>>>>
>>>>
>>>bazooka
>>>
>>mutual coupling
>
>This is the teen agers' euphemisim for having sex.
>
Hmmm, saw it on an antenna ad, and if I see it again I'll think back
to teenage sex.....Thanks Walt! 8-}

1007. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 01:02:03 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <fcCOc.467$Je5.431@nwrddc03.gnilink.net>
Source record: 91728
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

"Paul Burridge" <pb@notthisbit.osiris1.co.uk> wrote in message
news:isjlg0p10gtk7nr4poto878il3rf7ojj7k@4ax.com...
> On Fri, 30 Jul 2004 22:04:12 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
> > Paul
> >
> > I realize that I dont understand what needs to be done. I'm just too
far
> >out of touch with technology. But, is there any chance that a Ztheta
Chart
> >overlay would be of any assistance?? Properly used, the combination of
> >Smith and Ztheta can be a usefull tool. That overlay provides the
impedance
> >magnitude with its angle, at a glance, for all R+/- j X.
>
> Jerry, I appreciate your tip. But that's not actually what I'm trying
> to ascertain. The complete SC is hard enough to read as it is without
> overlaying a spherical grid on it! Your idea might well work, don't
> get me wrong, but I just need to know if S-Y mappings can be carried
> out with the Smith Chart *alone.*
>
> Thanks,
>
> Paul
> --
>
> "What is now proved was once only imagin'd." - William Blake, 1793.

Paul

I just now learned about S and Y parameters. I learned that they are WAY
too complex for me to understand. I think it *is* time for me to apologize
for commenting when I could have been more help by remaining silent.

Jerry

1008. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 01:21:21 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <u3p5fxshq9u1$.dlg@news.individual.net>
Source record: 91729
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 22:32:04 +0100, Paul Burridge, wrote:

> On Fri, 30 Jul 2004 12:11:11 -0700, John Larkin
> <jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:
>
>>You could write a little Basic program or an Excel atrocity.

VB is probably the more atrocious of the two ;)
>
> Indeed. And that is something I've considered. But The way Bowick
> explains it, it *ought* to be possible to perform the conversion
> summarily by a simple graphical method. Unfortunately, the
> arithmetical method he describes only works for linear polar charts,
> which of course the SC certainly isn't linear!
> And the guy who suggested the 180' rotation: I reckon that's *part* of
> the solution, but simply doing this alone merely converts impedances
> to admittances. S-params are typically denoted in the form x+/-yj

Bullshit. it's magnitude and angle. You plot Z = R + jX on the
friggin chart and measure the distance from the origin to get
magnitude. You measure the angle to get.. angle. Imagine that.

If you do mag = sqrt(R^2 + X^2) and angle = atan(X/R) and plot it,
you'll see that no conversion was necessary at all.

> whereas the Y-params are denoted as vector and angular co-ordinates,

More BS.

> so further mappings and/or translations are required following any
> rotation...
> Still, I'm sure someone out there will know. :-/

--
Best Regards,
Mike

1009. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 02:03:43 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <36DOc.4772$AY5.783@newssvr21.news.prodigy.com>
Source record: 91730

J.W., well, lets put it into context-- the Cushcraft 5 EL yagi Works
(but it it is NOT an optimum preformer: Calcs to the following specs:
7.58 DBd Gain, for your 11.8 foot long yagi-- if optimized, would run
8.0 DBd (f/b, respectavely , 9.95 DBd, optimized, would do 22.1 dB F/B)

Now, here are couple others (Because of constraints of time):

a homade 5 el yagi, with 17.6 ft long boom (yes, only 5-1/2 foot
longer), that would provide 11.39 DBd gain, , with a 25 Db f/b ratio

Or: a 4 el, yagi, that is 13 ft-2 inchs long (Gee, only 1-1/2 foot
longer)! with 8.47 DBd gain, and 23 DB f/b ratio, or, another 4 el
yagi, again for six, this 13 ft-8 inchs (2 foot longer), provides 8.91
DBd Gain, and a F/B of 19.45 Db !!
Now, granted these calculated gains in free space, and wont boor you
with the importance of Db , other than to try to patiently explain that
these are EXPONENTIAL (10 DB= 10 X the POWER, 20 DB= 100 x power, 30
DB= 1000 X Power, ect), nor trouble you with the FACT that when 6 is
dead, its DEAD- except for Tropo SCATTER!, and that in weak DOUBLE HOP
openings, the difference between low power, and/or antenna (Gain/Loss),
and a KW, with SERIOUS GAIN is often the difference between Q's, and
DEAD SILENCE! If you wish to work the limited openings, then, you are
ideally set up-- For a SERIOUS DX station, for six, GIVE IT UP, or get
MORE HORSEPOWER! (Hint: if you can be heard CONSISTANTLY,and hear them
600-1200 miles away, when you key up by other Serious stations, (and
like W7GJ, W6YKM, N7ML, K5CM, W5FF, N5JKV, Ect. Then you are getting
there- But remember, anyone when the band opens can work multitudes of
dx-- If serious, tho, remember mederocre dont get it! Jim NN7K

J999w wrote:
> So the message I'm reading is that Cushcraft antenna's are no more than a wet
> noodle.
>
> How much percentage increase in QSL's in the box would one expect to expect by
> changing from a Cushcraft to a computerized optimal yagi of your choice of the
> same boom length, same height, same feedline, etc?
>
> After all, Q's in the book is what it all boils down to. If one works say 100
> grid squares in 6 months, could you expect to work 110 grids (10% increase) ?
> 125 grids?
>
> I know I sure could use more front to back ratio ... those EN67 guys are really
> making it hard for me to get those last grids in FL !
>
> jw

> k9rzz
> (I don't know why I bother)

1010. Re: AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 02:08:27 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <shbrt1-l7l.ln1@p400bob.lse.com.au>
Source record: 91732

Lots of possibilities here...

How about a longish piece of wire attached to the terminal and another
from the ground terminal (if any) to "real ground"?

Or maybe wind a loop antenna on a smallish (say 8") former?

You might be able to get a ferrite bar antenna from places like Wes
Components...

There isnt anything critical about a AM broadscast receive antenna! If
noise is a problem you may need to take some more time with it...

Cheers Bob VK2YQA

Robert and Karen Gilland wrote:
> I want a simple AM Antenna to connect to my hi-fi system.
> I really like AM but I cannot access it at the moment.
>
> Does anyone know where I could get an AM Antenna for a Hi-Fi in Australia
>
> Regards,
>
> Robert.
>
>
>

1011. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 02:16:11 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <450mg01j0l3fqttp0n5e8b6peeatf055se@4ax.com>
Source record: 91731
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 21:21:21 -0400, Activ8 <reply2group@ndbbm.net>
wrote:

>On Fri, 30 Jul 2004 22:32:04 +0100, Paul Burridge, wrote:
>
>> On Fri, 30 Jul 2004 12:11:11 -0700, John Larkin
>> <jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:
>>
>>>You could write a little Basic program or an Excel atrocity.
>
>VB is probably the more atrocious of the two ;)

Garbage, of course. But PowerBasic is cool.

John

1012. Re: AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 03:21:53 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <vs3mg0dtr256prjr2vsngd60hqrii10uj4@4ax.com>
Source record: 91733

On Sat, 31 Jul 2004 10:36:00 +1000, "Robert and Karen Gilland"
<rjk1996@optushome.com.au> wrote:

>I want a simple AM Antenna to connect to my hi-fi system.
>I really like AM but I cannot access it at the moment.
>
>Does anyone know where I could get an AM Antenna for a Hi-Fi in Australia
>
>Regards,
>
>Robert.
>
>

My Adcom am-fm tuner/preamp came with a small AM loop that attaches to
a clamp on the back of the chassis. You might look at what type of AM
connector your hi-fi has, and then check for something from your
nearest hi-fi dealer.

bob
k5qwg

1013. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 03:52:44 UTC
From: John D <jawnd393@yahoo.com>
Message-ID: <gIEOc.704$Je5.277@nwrddc03.gnilink.net>
Source record: 91734

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10gln6sh67uf474@corp.supernews.com...
> JGBOYLES wrote:
>
> >>Conductors about 28 AWG. (7 strand of #34 or 35) .
> >>Separated about 1/4 inch apart.
> >>Width overall .361" x .125 or (almost 3/8)"
> >>Thickness overall 1/8"
> >>Web thickness .035"
> >
> >
> > The ARRL Antenna book says the Zo of a two wire line is Zo=276 log
(2S/d) ohms.
> > S is the center-to center wire spacing, and d is the diameter of the
wire plus
> > insulation. Sorry I don't have the time to calculate your Zo, maybe
later.
> > 73 Gary N4AST
>
> d is the diameter of the wire, period. The formula is for a line with no
> insulation. If the whole electric field is in the dielectric (as it is
> in coax), the impedance is modified by a factor 1/sqrt(erel) where erel
> is the relative permittivity (dielectric constant) of the insulation.
> 1/sqrt(erel) also happens to be the velocity factor in a line where the
> entire field is in the dielectric. For polyethylene, 1/sqrt(erel) is
> about 0.66, so the characteristic impedance of twinlead line with
> polyethylene insulation between conductors (where some but not all the
> field is in the dielectric) is somewhere between the value calculated
> from the formula and 0.66 times that value. You can measure the velocity
> factor by a number of methods. If you know the velocity factor, the
> impedance is the formula value times the velocity factor.
>
> Roy Lewallen, W7EL
****
Well, I'm no math whiz but I get 392 ohms or x.66=259 ohms
(2 x .25) / .019 = 26.31 , 26.31 press [log] gets 1.42, 1.42 x 276=
392, 392 x .66=259

So maybe its just some skinny 300 ohm twinlead

I tried the same formula for some known 300 ohn twinlead and got 387 to 255.

1014. Looking for HAMS who went to NYU/ operated W2DSC

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 04:28:26 UTC
From: fjx1@aol.comnospam
Message-ID: <20040731002826.04802.00000670@mb-m12.aol.com>
Source record: 91735

Looking for HAMS who graduated from NYU and maybe operated W2DSC. We have a web page with history back to 1932.

Tks,

Gerry

1015. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 04:38:22 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <2nFOc.4820$AY5.1682@newssvr21.news.prodigy.com>
Source record: 91736

Oh, and when say Consistantly, I mean you hear those folks ANYTIME, of the DAY, Night, ect, WITH or WITHOUT a band opening (24/7) I hear them here without any band openings-- DO YOU ?? Have fun-- Jim

Jim - NN7K wrote:

nor trouble you with the FACT that when 6 is
> dead, its DEAD- except for Tropo SCATTER!, and that in weak DOUBLE HOP
> openings, the difference between low power, and/or antenna (Gain/Loss),
> and a KW, with SERIOUS GAIN is often the difference between Q's, and
> DEAD SILENCE! If you wish to work the limited openings, then, you are
> ideally set up-- For a SERIOUS DX station, for six, GIVE IT UP, or get
> MORE HORSEPOWER! (Hint: if you can be heard CONSISTANTLY,and hear them
> 600-1200 miles away, when you key up by other Serious stations, (and
> like W7GJ, W6YKM, N7ML, K5CM, W5FF, N5JKV, Ect. Then you are getting
> there- But remember, anyone when the band opens can work multitudes of
> dx-- If serious, tho, remember mederocre dont get it! Jim NN7K

1016. Icom AH-4 Placement and Really Cold Weather

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 04:40:33 UTC
From: asaciuk@hotmail.com
Message-ID: <507b07c2.0407302040.2750099b@posting.google.com>
Source record: 91737

Hello!

I've been thinking about buying an Icom AH-4 Tuner, to run multiband on an end fed antenna. I was hoping to place the AH-4 as near to the roof as possible, as the end fed is going to run from the roof peak of the back of my house, to a large tree in the front yard (too many wires, hydro poles and accidents waiting to happen in the back).

Now here is the problem... Our winters north of the 49th often reach temperatures of -35 celcius for weeks on end, which according to the literature, are beyond the AH-4's tolerance of -10 celcius.

What would be the easiest solution? The attic naturally gets as cold as outdoors, so I can't stash the tuner in the attic, and run the wire out. I don't know about putting the tuner in the closet to run a single wire through the wall and out, as I want to get the transmitting wire high up, and as far away from myself as possible. I have an Icom 746, so I was hoping to actually use full power (100 watts) and feel comfortable about keeping the AH-4 at a reasonable temperature, and yet not rearranging my DNA while I transmit.

Any suggestions would be greatly appreciated

73,
Andrew
VE4SCK

1017. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 04:51:41 UTC
From: Rex Allers <rexa@sonic.net>
Message-ID: <uu6mg0lc8pl6b2uc61iigiiob4qj9qjj05@4ax.com>
Source record: 91739
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 16:29:42 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>I sense some confusion about s and y parameters. S parameters aren't
>impedances -- they're dimensionless transmission or reflection
>coefficients.
[etc.]

>Roy Lewallen, W7EL

Roy,

Thanks for another well informed and sensible reply.

Paul,

Why limit yourself to going from S to Y parameters. Might as well go for H and Z parameters too.

If possible, find yourself a copy of HP Application Note 154, April, 1972 "S-Parameter Design". In the first few paragraphs they point out that H, Y, and Z parameters are defined by voltages and currents.

Quoting:

"The important thing to note here is that both open and short circuits are essential for making these measurements.

Moving to higher and higher frequencies, some problems arise:
1. Equipment is not readily available to measure total voltage and total current at the ports of the network.
2. Short and open circuits are difficult to achieve over a broad band of frequencies.
3. Active devices, such as transistors and tunnel diodes, very often will not be short or open circuit stable."

So, since the 60's, RF designers have been using S-parameters to characterize devices and circuits. They are based on reflection and transmission in a 50 ohm system. They are measurable. Why do you feel you want to use Y parameters? (Why-oh Y-oh?)

1018. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 04:52:11 UTC
From: tdonaly@aol.com
Message-ID: <20040731005211.09145.00000709@mb-m01.aol.com>
Source record: 91738

>
>
> I just now learned about S and Y parameters. I learned that they are WAY
>too complex for me to understand. I think it *is* time for me to apologize
>for commenting when I could have been more help by remaining silent.
>
> Jerry

No they're not. Keep trying.
73,
Tom Donaly, KA6RUH
(P.S. Anyone can get a programmable calculator, program in the
equations, and then press the buttons to get an answer. There's no
point in trying it with a Smith Chart.)

1019. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 07:47:17 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <C+vsSWDF60CBFAc7@ifwtech.co.uk>
Source record: 91740

J999w wrote:
>
>How much percentage increase in QSL's in the box would one expect to
>expect by changing from a Cushcraft to a computerized optimal yagi of
>your choice of the same boom length, same height, same feedline, etc?
>
>After all, Q's in the book is what it all boils down to.

It all depends on your attitude towards DX.

The easy QSOs were always going into the book - any antenna would have hooked them. This is especially true with 6m summer E-skip.

But what about the ones that DON'T get into the book? The ones you can't quite copy; the ones who can't quite copy you; the pileups you fail to break; the contest multipliers you fail to score... the ones you really wanted.

Very soon, it's the QSOs you DON'T make that really start to matter. And then you start to think, and can be heard muttering things like...
>I know I sure could use more front to back ratio ... those EN67 guys
>are really making it hard for me to get those last grids in FL !
>

If such things bug you, then beware - you're in danger of becoming a serious DXer.

Casual DXers are probably happier people, but don't let them tell you that those last few decibels "don't matter." If they matter in *your* kind of amateur radio, then they *are* important.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

1020. Re: AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 08:05:15 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ZoIOc.3623$g_5.2452@bignews4.bellsouth.net>
Source record: 91741

Attach 1 long wire to the antenna terminal - run the wire as high and long
as you can
attach another wire to the Ground terminal - run it to a cold-water pipe
(metal) or ground rod

"Robert and Karen Gilland" <rjk1996@optushome.com.au> wrote in message
news:410ae907$0$29446$afc38c87@news.optusnet.com.au...
> I want a simple AM Antenna to connect to my hi-fi system.
> I really like AM but I cannot access it at the moment.
>
> Does anyone know where I could get an AM Antenna for a Hi-Fi in Australia
>
> Regards,
>
> Robert.
>
>
>

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1021. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 08:12:42 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ZvIOc.3151$3G6.284@bignews3.bellsouth.net>
Source record: 91742

Sounds like Radio-Shack 300-ohm weatherproof twinlead.
solder a 50-ohm resistor across the wires and hook up a MFJ 259
I've used 300-ohm twinlead - because it was cheap and low-loss(no flames
pls) - but I wound 4-to-1 baluns for use on both ends . I could live with
1.5 swr

OR use it to feed a G5RV - without baluns - or should I say as 'part-of' a
G5RV

"John D" <jawnd393@yahoo.com> wrote in message
news:5XvOc.82$UN2.3@nwrddc02.gnilink.net...
> I'm a new ham and this will be used for my first antenna.
>
> I have 97 ft of twinlead that I think might be 75 ohm but there is no
> identifying label on it.
> I have searched the web and can't find any information on 75 ohm twinlead.
> Can anyone identify this wire from these dimensions?
>
> Conductors about 28 AWG. (7 strand of #34 or 35) .
> Separated about 1/4 inch apart.
> Width overall .361" x .125 or (almost 3/8)"
> Thickness overall 1/8"
> Web thickness .035"
> Each wire has some white insulation around it and the outer twinlead
shaped
> insulation is black
>
> This wire is very light and I want to use it to feed a HF dipole with no
> center support.
> My maximum power is 200 watts.
> John
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1022. Re: parallel transmission lines

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 08:23:06 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <LFIOc.125$I52.21@bignews6.bellsouth.net>
Source record: 91743

ITs ok to use 75-ohm coax - 1.5 swr is acceptable - right? so why try to convert it

"Dan Jacobson" <jidanni@jidanni.org> wrote in message news:87zn5j1kps.fsf@jidanni.org...
> [Recall Junior has tons of 75 ohm CATV cable, and wants to make a 50
> ohm cable.] Recalling the way resistors and capacitors can be hooked
> in series or parallel, say, do parallel cables halve or double the
> ohms? One center lead to one side of the dipole, the other center
> lead to the other side of the dipole. The braids hooked together I
> suppose. Or, both center leads hooked to top side of dipole, both
> braids hooked to bottom side of dipole. All kind of combos possible.
> Wait, this is all a waste of cable. OK, never mind.

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1023. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 08:33:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <xPIOc.3420$3G6.460@bignews3.bellsouth.net>
Source record: 91744

Not to argue, but you might want to look up AM (amplitude modulation)
The AM broadcast band is another matter.
If you have a 580 khz carrier you can turn it on/off (digital) - or - you
can modulate it (AM). - and I guess you could do both at the same time.
we use digital - (morse code) on the ham bands

"wolfee" <clambrain@com.invalid> wrote in message
news:DPeOc.349677$Gx4.319225@bgtnsc04-news.ops.worldnet.att.net...
> Hal, if it is digital in the AM band and digital in the FM band then how
can
> we differentiate if we dont call it AM digital and FM digital? I think you
> should visit the designers site at www.ibiquity.com for some
enlightenment.
>
>
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:Tx%Nc.1360$N%3.347@bignews6.bellsouth.net...
> > sorry to break the news
> > its AM OR Digital - but not AM digital and not digital AM
> >
> >
> > "wolfee" <clambrain@com.invalid> wrote in message
> > news:1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net...
> > > I thought it was already here. ibiquity lists stations broadcasting
and
> > > manufacturers delivering digital receivers right now.
> > >
> > > "RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
> > > news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
> > > >
> > > > > I just bought a Terk Advantage antenna. It really does help my
> cheap
> > > > little
> > > > > table top radio get stations a lot farther away. Will I still be
> able
> > > to
> > > > > use it when digital AM radio arrives?
> > > > >
> > > > I will tell you when Digital AM radio arrives !!!
> > > >
> > > > Steve
> > > >
> > > >
> > > >

> > >
> > >
> >
> >
> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
> >
> >
>
>

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Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1024. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 08:34:56 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <QQIOc.3438$3G6.2767@bignews3.bellsouth.net>
Source record: 91745

finally met the kettle

"Graybyrd" <me@privacy.net> wrote in message
news:me-523A99.02380729072004@corp-radius.supernews.com...
> Yeh, and it's so nice to point that out.
>
> Guess that's either "Smartass" or "Ass" but not "Smart" or "Asssmart"
>
> Luv you phukin phlamers and ur lame smarts.
>
> Gray
>
>
>
>
> In article <Tx%Nc.1360$N%3.347@bignews6.bellsouth.net>,
> "Hal Rosser" <hmrosser@bellsouth.net> wrote:
>
> > sorry to break the news
> > its AM OR Digital - but not AM digital and not digital AM
> >
> >
> > "wolfee" <clambrain@com.invalid> wrote in message
> > news:1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net...
> > > I thought it was already here. ibiquity lists stations broadcasting
and
> > > manufacturers delivering digital receivers right now.
> > >
> > > "RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
> > > news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
> > > >
> > > > > I just bought a Terk Advantage antenna. It really does help my
cheap
> > > > little
> > > > > table top radio get stations a lot farther away. Will I still be
able
> > > to
> > > > > use it when digital AM radio arrives?
> > > > >
> > > > I will tell you when Digital AM radio arrives !!!
> > > >
> > > > Steve
> > > >
> > > >

> > > >
> > >
> > >
> >
> >
> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
> >
> >
>
> --
> Reply to: allen/at/graybyrd/dot/com

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1025. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 08:57:48 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <daJOc.1412$U23.540@bignews5.bellsouth.net>
Source record: 91746

OK - I see what they're doing - piggy-backing digital on top of AM - so
they're doing both at the same time
interesting - you need one type of radio for AM and another tyype to receive
the 'HD' signal

"wolfee" <clambrain@com.invalid> wrote in message
news:DPeOc.349677$Gx4.319225@bgtnsc04-news.ops.worldnet.att.net...
> Hal, if it is digital in the AM band and digital in the FM band then how
can
> we differentiate if we dont call it AM digital and FM digital? I think you
> should visit the designers site at www.ibiquity.com for some
enlightenment.
>
>
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:Tx%Nc.1360$N%3.347@bignews6.bellsouth.net...
> > sorry to break the news
> > its AM OR Digital - but not AM digital and not digital AM
> >
> >
> > "wolfee" <clambrain@com.invalid> wrote in message
> > news:1FQNc.341869$Gx4.10888@bgtnsc04-news.ops.worldnet.att.net...
> > > I thought it was already here. ibiquity lists stations broadcasting
and
> > > manufacturers delivering digital receivers right now.
> > >
> > > "RADIOTWO" <steveremovewright@ntlworld.com> wrote in message
> > > news:zIMNc.484$89.467@newsfe3-gui.ntli.net...
> > > >
> > > > > I just bought a Terk Advantage antenna. It really does help my
> cheap
> > > > little
> > > > > table top radio get stations a lot farther away. Will I still be
> able
> > > to
> > > > > use it when digital AM radio arrives?
> > > > >
> > > > I will tell you when Digital AM radio arrives !!!
> > > >
> > > > Steve
> > > >
> > > >
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> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004
> >
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>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1026. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 09:22:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10gmp74dutntb9a@corp.supernews.com>
Source record: 91747

John D wrote:

> **********
> Well, I'm no math whiz but I get 392 ohms or x.66=259 ohms
> (2 x .25) / .019 = 26.31 , 26.31 press [log] gets 1.42, 1.42 x 276=
> 392, 392 x .66=259
>
> So maybe its just some skinny 300 ohm twinlead

Yep.

> I tried the same formula for some known 300 ohn twinlead and got 387 to 255.

I've measured the velocity factor of some flat twinlead with fairly heavy insulation at about 0.8. 0.8 times your no-insulation value of 387 ohms is 310, so that's about right. By the way, don't expect "300 ohm" twinlead to be exactly 300 ohms, or even really close. The tolerance is very loose.

Roy Lewallen, W7EL

1027. trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 09:49:47 UTC
From: matt wilson <mwilson2@nospam.bigpond.net.au>
Message-ID: <%WJOc.24806$K53.3925@news-server.bigpond.net.au>
Source record: 91748

I have a 1.8m fibreglass rod from a 27Mhz whip, to which I have added braiding to make a 1/4 wave at 52Mhz.

Now, I still have a foot of glass left at the top and I'm interested in making it resonant at 10m as well. I understand how to make traps for a given frequency, but not how to calculate what that frequency should be in the case of a non-resonant trap.

As I understand it, a trap at resonance 'somewhere' between 29 and 52 Mhz can be added to a whip that will electrically lenghten it into resonance at 10m, and electrically shorten it into resonance at 6m.

What I don't understand is exactly how one calculates:
The traps own resonance
The equilant physical length of the trap at a given frequency, and
The lengths of the radiating segments, allowing for loading and mutual coupling.

I appreciate that some "real world" tweaking of the design is almost always required, but how is the basic layout produced? Is it possible to calculate in advance which combinations will work well and which won't?

1028. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 10:22:59 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <aVXDDCBDM3CBFwcK@jmwa.demon.co.uk>
Source record: 91749
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote (in <k2flg05dg83q9vhr08gphfq95lfs9p3
f71@4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on
Fri, 30 Jul 2004:
>S-params are typically
>denoted in the form x+/-yj whereas the Y-params are denoted as vector
>and angular co-ordinates, so further mappings and/or translations are
>required following any rotation...

I don't know which way you want to convert, but the conversion from
magnitude and angle to complex Cartesian co-ordinates is:

x = mag*cos(angle), y = mag*sin(angle)

Be careful of the signs of sin and cos if angle is negative. sin is
negative and cos is positive. You can see this if you draw a simple
diagram of x and y axes.

To convert the other way,

mag = sqrt(x^2 + y^2), angle =arctan(y/x).

This isn't difficult mathematics in these days of scientific
calculators, but you do need to be careful about signs, AND check that
the result is credible: if it isn't, you probably made a keying error.

For example, when you calculate angle, then calculate its sin and cos,
to check with the original data.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1029. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 10:48:37 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <hstmg0lv7e1n0t0066mn4gun9076lsnpct@4ax.com>
Source record: 91750
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 04:51:41 GMT, Rex Allers <rexa@sonic.net> wrote:

>On Fri, 30 Jul 2004 16:29:42 -0700, Roy Lewallen <w7el@eznec.com> wrote:
>
>>I sense some confusion about s and y parameters. S parameters aren't
>>impedances -- they're dimensionless transmission or reflection
>>coefficients.
>[etc.]
>
>>Roy Lewallen, W7EL
>
>Roy,
>
>Thanks for another well informed and sensible reply.

Hear! Hear! Thank God there are still some folks here who know what
they're talking about.

[snip]
>So, since the 60's, RF designers have been using S-parameters to
>characterize devices and circuits. They are based on reflection and
>transmission in a 50 ohm system. They are measurable. Why do you feel
>you want to use Y parameters? (Why-oh Y-oh?)

I agree entirely, Rex. I'd much sooner use scattering parameters alone
for the reasons given in your post. The only flY in the ointment is
that some datasheets only provide Y-params and when those times arise
one needs to be able to convert between the two. Now it transpires
from what Roy has stated that there is no feasible way to convert the
two using the Smith Chart. That's fine; at least I know I'm not doing
all that mathematical manipulation unnecessarily. John L's suggestion
of writing a routine to do the fiddly bits now seems the most likely
solution. Should only take about a line-and-a-half of C++.
Thanks, both.

--

"What is now proved was once only imagin'd." - William Blake, 1793.

1030. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 10:55:03 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <k8umg0l8u45p8m8qi8cqp73tud4t0jpjsc@4ax.com>
Source record: 91751
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Fri, 30 Jul 2004 21:21:21 -0400, Activ8 <reply2group@ndbbm.net>
wrote:

>Bullshit. it's magnitude and angle. You plot Z = R + jX on the
>friggin chart and measure the distance from the origin to get
>magnitude. You measure the angle to get.. angle. Imagine that.
>
>If you do mag = sqrt(R^2 + X^2) and angle = atan(X/R) and plot it,
>you'll see that no conversion was necessary at all.

I *have* done the maths and plotted it. That's the whole point of the
original question. I can only assume you didn't understand the
original point or else you're incapable of expressing yourself
clearly. If you don't have anything useful to contribute to the
threads I start then I'd be grateful if you just kept your views to
yourself. There was a time when I valued your input but it seems those
days are over.
'Bye, Mike.

--

"What is now proved was once only imagin'd." - William Blake, 1793.

1031. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:01:16 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <6lYL$NB8v3CBFw7Y@jmwa.demon.co.uk>
Source record: 91752
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Jerry Martes
<j.jmartes@verizon.net> wrote (in <fcCOc.467$Je5.431@nwrddc03.gnilink.ne
t>) about 'S - Y Parameter conversion with Smith Chart', on Sat, 31 Jul
2004:
> I just now learned about S and Y parameters. I learned that they are
>WAY too complex for me to understand. I think it *is* time for me to
>apologize for commenting when I could have been more help by remaining
>silent.

I suspect that in fact they aren't too complex for you to understand.
There are lots of over-complicated explanations around. The Y
(admittance) parameters relate the input and output currents to the
input and output voltages, using the basic equation (Ohm's Law V = IR
inverted) I = VY.

Because there is internal feedback and feed-forward inside the
transistor, the output voltage has an (unwanted, usually) effect on the
input current and the input voltage has a wanted effect on the output
current. For this we get two not very difficult equations:

Iin = VinYin + VoutYfeedback

Iout = Vin Yfeedforward + VoutYout

The suffixes are often replaced by two numbers, where 1 means input and
2 means output.

I in = I1, Vin = V1, Iout = I2, Vout = V2.

Yin = Y11, Yfeedback = Y12, Yfeedforward = Y21, Yout = Y22.

S parameters deal with how well the input and output impedances match a
specified characteristic impedance, usually 50 ohms, and are based on
incident and reflected powers.

In the general case, the possibility appears to be allowed of applying
power at the output as well as, or instead of, the input. Normally, of
course, this isn't the case; the 'output power' flows out of the device
and is what you want!

Pina is the power applied to the input and Pinr is the power reflected
(if the input impedance doesn't match the chosen characteristic
impedance). Pouta is the power produced (or applied) at the output and
Poutr is the reflected power at the output (if there is a mismatch).

Using the numbers 1 and 2 as explained above:

Pinr = S11Pina + S12Pouta

Poutr = S21Pina + S22Pouta

Again, these are not very difficult. However, some of the calculations using them can be a bit more complicated, but don't use any mathematical concepts more advanced that square roots, sin, cos and tan, and x + jy.

There is a paper in Electronics, October 16 1967, 'Quick amplifier design with scattering parameters' by William H Froehner (then of TI), which gives a lot of useful information, and a reference to a previous, simpler paper. I only have a monochrome photocopy, and some of the diagrams use colour, but it may be possible to retrieve the original through a library service.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1032. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:03:31 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <iVXNDaBDy3CBFwbV@jmwa.demon.co.uk>
Source record: 91753
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that John Larkin <jjlarkin@highSNIPland
THIStechPLEASEnology.com> wrote (in <hhklg0d1e3fecafd6umjb9sq7g7retbqu7@
4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on Fri,
30 Jul 2004:
>A universal
>conversion program would be nice, espacially if it included equivalent
>reactance, capacitance, inductance, stuff like that.

It might be nice, but it's dumbing down the subject, and anyone using s-
parameters for real had better *understand* what he/she is doing,
otherwise any success would be a pure fluke.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1033. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:25:26 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <ZKuzUkBmG4CBFwsp@jmwa.demon.co.uk>
Source record: 91754
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Roy Lewallen <w7el@eznec.com>
wrote (in <10glmf6regc7re4@corp.supernews.com>) about 'S - Y Parameter
conversion with Smith Chart', on Fri, 30 Jul 2004:

>Transformation from s to y or vice-versa isn't simple. For example,
>
>y11 = {[(1 - s11)(1 + s22) + s12s21] / [(1 + s11)(1 + s22) - s12s21]}/Z0

It doesn't look too simple written in ASCII, but it only uses addition,
subtraction, multiplication and division, with brackets [1]. It's a bit
easier to understand if you get rid of the double division by moving Z0
up-front, and write out the remaining division as a fraction:

$$y11 = Z0 * \frac{(1 - s11)*(1 + s22) + s12*s21}{(1 + s11)*(1 + s22) - s12*s21}$$

[1] OK, you need a few basics of phasor arithmetic:

If S is a phasor = magS,angleS and T is a phasor = magT, angleT, then:

S + T = (magS + magT),(angleS + angleT)

S - T = (magS - magT),(angleS - angleT)

S*T = (magS*magT),(angleS + angleT)

S/T = (magS/magT),(angleS - angleT)

To convert dBmagS in dB to magS as a number, magS = 10^(dBmagS/10). (/10
because the equations are about power, not voltage or current.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1034. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:28:36 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <TqOxcwBkJ4CBFwOc@jmwa.demon.co.uk>
Source record: 91755
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Rex Allers <rexa@sonic.net> wrote
(in <uu6mg0lc8pl6b2uc61iigiiob4qj9qjj05@4ax.com>) about 'S - Y Parameter
conversion with Smith Chart', on Sat, 31 Jul 2004:

>Why limit yourself to going from S to Y parameters. Might as well go for
>H and Z parameters too.

With unlimited time, go the whole hog and do K, A and B parameters as
well! (;-)

I suppose there is an inverse-S parameter set (T-parameters?) as well.
Let us hope that there aren't any more!
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1035. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:46:31 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1t4nb5b0fdjp$.dlg@news.individual.net>
Source record: 91756
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 11:55:03 +0100, Paul Burridge wrote:

> On Fri, 30 Jul 2004 21:21:21 -0400, Activ8 <reply2group@ndbbm.net>
> wrote:
>
>>Bullshit. it's magnitude and angle. You plot Z = R + jX on the
>>friggin chart and measure the distance from the origin to get
>>magnitude. You measure the angle to get.. angle. Imagine that.
>>
>>If you do mag = sqrt(R^2 + X^2) and angle = atan(X/R) and plot it,
>>you'll see that no conversion was necessary at all.
>
> I *have* done the maths and plotted it. That's the whole point of the
> original question. I can only assume you didn't understand the
> original point or else you're incapable of expressing yourself
> clearly.

I understand that you don't understand that you can read Y, Z, and S
params directly off the chart. The only time you need the
conversions is if you don't have a vhart.

here's your OP:

"I see in Chris Bowick's book on RF circuit design, he provides 8
quite
long-winded formulas for converting between S and Y parameters and
vice-versa. I'm always prone to making careless errors (particularly
with signs) with these kind of equations, so I was wondering if
there's a simpler, graphical method for conversion using the Smith
Chart. After all, that's what it was devised for - the elimination
of
computational errors in such calculations.
I've tried using the vastly simpler rectangular/polar co-ordinate
conversion formulas, but they don't plot correctly on the Smith
Chart,
it seems.
So, does anyone know of a simple graphical way to do it on the SC?"

So turn to page 106 and notice that an S param is plotted and if the
light and your eyes are good enough, you'll see that the point is
also labeled 2 + j1.5

Now what's with the learning disability?

> If you don't have anything useful to contribute to the
> threads

I just did. Twice. Don't jump my ass just because what you heard is
not what you wanted to hear.

> I start then I'd be grateful if you just kept your views to
> yourself. There was a time when I valued your input but it seems those
> days are over.
> 'Bye, Mike

Then maybe I should charge you for my input.

--
Best Regards,
Mike

1036. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:53:23 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <9np034j13fct$.dlg@news.individual.net>
Source record: 91757
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 12:01:16 +0100, John Woodgate wrote:
<snip>
>
> There is a paper in Electronics, October 16 1967, 'Quick amplifier
> design with scattering parameters' by William H Froehner (then of TI),
> which gives a lot of useful information, and a reference to a previous,
> simpler paper. I only have a monochrome photocopy, and some of the
> diagrams use colour, but it may be possible to retrieve the original
> through a library service.

Motorola also has a couple ANs on "amplifier" "design" and
"impedance matching". Keywords would be those quoted above and
"Linvill".
--
Best Regards,
Mike

1037. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 11:58:28 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <dyryw3fq7wwe.dlg@news.individual.net>
Source record: 91758
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 11:48:37 +0100, Paul Burridge wrote:

> On Sat, 31 Jul 2004 04:51:41 GMT, Rex Allers <rexa@sonic.net> wrote:
>
>>On Fri, 30 Jul 2004 16:29:42 -0700, Roy Lewallen <w7el@eznec.com> wrote:
>>
>>>I sense some confusion about s and y parameters. S parameters aren't
>>>impedances -- they're dimensionless transmission or reflection
>>>coefficients.
>>[etc.]
>>
>>>Roy Lewallen, W7EL
>>
>>Roy,
>>
>>Thanks for another well informed and sensible reply.
>
> Hear! Hear! Thank God there are still some folks here who know what
> they're talking about.
>
> [snip]
>>So, since the 60's, RF designers have been using S-parameters to
>>characterize devices and circuits. They are based on reflection and
>>transmission in a 50 ohm system. They are measurable. Why do you feel
>>you want to use Y parameters? (Why-oh Y-oh?)
>
> I agree entirely, Rex. I'd much sooner use scattering parameters alone
> for the reasons given in your post. The only flY in the ointment is
> that some datasheets only provide Y-params and when those times arise
> one needs to be able to convert between the two. Now it transpires
> from what Roy has stated that there is no feasible way to convert the
> two using the Smith Chart. That's fine; at least I know I'm not doing
> all that mathematical manipulation unnecessarily. John L's suggestion
> of writing a routine to do the fiddly bits now seems the most likely
> solution. Should only take about a line-and-a-half of C++.
> Thanks, both.

Uh, I wrote the code and only implemented some of the derived
classes and it's way more code than that.
--
Best Regards,
Mike

1038. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 12:18:19 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <f53ng0ttgfmqv2b2c0eub7g5nb7sdrrjom@4ax.com>
Source record: 91759
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 07:46:31 -0400, Activ8 <reply2group@ndbbm.net>
wrote:

The revelant snippet:

>So, does anyone know of a simple graphical way to do it on the SC?"

>So turn to page 106 and notice that an S param is plotted and if the
>light and your eyes are good enough, you'll see that the point is
>also labeled 2 + j1.5

Well so? Since you think you know better than everyone else here,
perhaps you'd like to tell us how to convert this S-parameter, plotted
on the chart as you say as 2+j1.5 to its Y-parameter equivalent
without using the conversion formulas shown on P.107? For the
avoidance of doubt: show us how you would derive the equivalent
Y-parameter for 2+j1.5 by the use of the Chart alone.

>I just did. Twice. Don't jump my ass just because what you heard is
>not what you wanted to hear.

I jumped on your "ass" because every follow-up you make lately seems
to start with "Bullshit" and that's not a constructive way to
contribute by any definiton.

>> I start then I'd be grateful if you just kept your views to
>> yourself. There was a time when I valued your input but it seems those
>> days are over.
>> 'Bye, Mike
>
>Then maybe I should charge you for my input.

Fine. I'll send you a capacitor for the purpose. 1pF ought to cover
it.

--

"What is now proved was once only imagin'd." - William Blake, 1793.

1039. Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 12:19:04 UTC
From: fractenna@aol.com
Message-ID: <20040731081904.04588.00002232@mb-m10.aol.com>
Source record: 91760

Mr. Robert Vincent's/ University of Rhode island (URI) "revolutionary, new" DLM antenna technology has experienced some public informational updates. In particular, I suggest the following URL:

http://www.uri.edu/research/tro/NCD_for_Tape,_040604.html

As I have stated previously, I am of the opinion that the issue of 'new' and 'revolutionary' may not be accurate when considering the prior art relative to Mr. Vincents' 'DLM antenna technology'. In support of this, I have purchased an antenna which appears to be predominantly marketed to CB'ers and truckers, although it also can be used by hams. The manufacturer's statements closely match Mr Vincent's claims with respect to efficiency, bandwidth, and size. It is not the Midland antenna I alluded to earlier. As the company has had the product out for several years--according to the sales department-- it is unlikely to be a licensed Vincent DLM antenna (many years is not 'new'). The manufacturer appears to represent the antenna realistically, in my opinion, and does not pose it as 'revolutionary', to my knowledge. Instead, the manufacturer has apparently found an appropriate niche with CB truckers.

I will provide additional information coinciding with the oral public discussion of the Vincent DLM antenna in mid-August. I will personally conduct range measurements on this commercially available antenna--which is clearly a distributed-load monopole. This is a technical fact: It is loaded, and it is not contunuously loaded: the load is distributed. I have already secured a URL for reporting these results, if needed.

It is important at this point to understand that Mr. Vincent's claims of 'wide in bandwidth' allude to 3-5%. In comparison, a dipole exceeds this value. Most skilled in the art would not refer to 3-5% bandwidths as wideband. It is also important to understand that antenna(s) with similar claims of similar bandwidth, at high efficiency, and 1/3 the regular size is (are) available on the commercial market. It will be interesting to see if the Vincent DLM antenna technology is better than something else already available to CB'ers, for example. I am of the opinion that this will not prove to be so.

73,
Chip N1IR

1040. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 12:30:29 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <410B90E5.4020107@myrealbox.com>
Source record: 91762

matt wilson wrote:
> I have a 1.8m fibreglass rod from a 27Mhz whip, to which I have added
> braiding to make a 1/4 wave at 52Mhz.
>
> Now, I still have a foot of glass left at the top and I'm interested in
> making it resonant at 10m as well. I understand how to make traps for a
> given frequency, but not how to calculate what that frequency should be
> in the case of a non-resonant trap.
>
> As I understand it, a trap at resonance 'somewhere' between 29 and 52
> Mhz can be added to a whip that will electrically lenghten it into
> resonance at 10m, and electrically shorten it into resonance at 6m.
>
> What I don't understand is exactly how one calculates:
> The traps own resonance
> The equilant physical length of the trap at a given frequency, and
> The lengths of the radiating segments, allowing for loading and mutual
> coupling.
>
> I appreciate that some "real world" tweaking of the design is almost
> always required, but how is the basic layout produced? Is it possible to
> calculate in advance which combinations will work well and which won't?

Well, you almost have it correct. The trap should resonate in the middle
of the band you wish to operate. For example, if you wish to operate
from 28 to 29 MHz you would resonate the trap at ~28.5 MHz.

The idea behind the trap is that, at resonance, 28.5 MHz, it provides
a low impedance to your signal and connects through to the extra wire
that is past the trap. At 52 MHz the trap would present a high impedance
and effectively isolate the extra wire from the rest of the antenna.

There are several varieties of traps. The most basic is the coil and
capacitor variety. Then there are several types of traps made out of
coaxial cable. I have found the coaxial type to be the easiest to work
with. For information on designing these traps get a copy of HamCalc.
The latest version can be had at

http://www.cq-amateur-radio.com/HamCalcem.html

There is a windows version at the following address but I don't know
if it contains everything that the original has in it.

http://www.vwlowen.demon.co.uk

I'll have similar information, but in a different format, on my own web site when I get the chance.

The method that I use to adjust a trap antenna is to start with the hightest frequency first.

1. Get the 52 MHz adjusted to the right length first, with no trap or extra wire added.

2. Using a grid-dip meter, adjust the trap for resonance. Do this without the trap connected to anything. You will not be able to check it's resonance once it is connected to the antenna elements. Fine tune the resonance by adjusting the turns spacing of the coil. Once you get it where you want it, secure the turns in place with tape or glue.

3. Add the extra wire and adjust the length for a reasonably low SWR on 10 Meters. The HamCalc programs will give you a estimation on the shortening effect of the trap.

If you don't have a grid-dip meter, try and borrow one from someone. For only a single use it wouldn't make sense to buy one.

You didn't say whether you are using this for mobile or base station use. What are you using for ground radials? For 6 Meters you should have several radials that are a little longer than 1/4 wave, at 6 Meters. To make the antenna load better on 10 Meters, add more radials that are a little longer than 1/4 wave at 10 Meters. I do it by using the same tie point at the feed but then I fan them out away from the antenna.

If I made any errors in this I'm sure that someone else will correct things. Good Luck.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

1041. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 12:41:50 UTC
From: VK3KCG <VK3KCG@nospamamsat.org>
Message-ID: <410b938c$0$6790$afc38c87@news.optusnet.com.au>
Source record: 91761

I think that the patents will be pending for ever.....

--
http://dxantennas.com

http://802antennas.com
"Fractenna" <fractenna@aol.com> wrote in message
news:20040731081904.04588.00002232@mb-m10.aol.com...
>
>
> Mr. Robert Vincent's/ University of Rhode island (URI) "revolutionary,
new"
> DLM antenna technology has experienced some public informational updates.
In
> particular, I suggest the following URL:
>
> http://www.uri.edu/research/tro/NCD_for_Tape,_040604.html
>
> As I have stated previously, I am of the opinion that the issue of 'new'
and
> 'revolutionary' may not be accurate when considering the prior art
relative to
> Mr. Vincents' 'DLM antenna technology'. In support of this, I have
purchased an
> antenna which appears to be predominantly marketed to CB'ers and truckers,
> although it also can be used by hams. The manufacturer's statements
closely
> match Mr Vincent's claims with respect to efficiency, bandwidth, and size.
It
> is not the Midland antenna I alluded to earlier. As the company has had
the
> product out for several years--according to the sales department-- it is
> unlikely to be a licensed Vincent DLM antenna (many years is not 'new').
The
> manufacturer appears to represent the antenna realistically, in my
opinion, and
> does not pose it as 'revolutionary', to my knowledge. Instead, the
manufacturer
> has apparently found an appropriate niche with CB truckers.
>
> I will provide additional information coinciding with the oral public
> discussion of the Vincent DLM antenna in mid-August. I will personally
conduct
> range measurements on this commercially available antenna--which is
clearly a

> distributed-load monopole. This is a technical fact: It is loaded, and it
is
> not contunuously loaded: the load is distributed. I have already secured a
URL
> for reporting these results, if needed.
>
> It is important at this point to understand that Mr. Vincent's claims of
'wide
> in bandwidth' allude to 3-5%. In comparison, a dipole exceeds this value.
Most
> skilled in the art would not refer to 3-5% bandwidths as wideband. It is
also
> important to understand that antenna(s) with similar claims of similar
> bandwidth, at high efficiency, and 1/3 the regular size is (are) available
on
> the commercial market. It will be interesting to see if the Vincent DLM
antenna
> technology is better than something else already available to CB'ers, for
> example. I am of the opinion that this will not prove to be so.
>
>
> 73,
> Chip N1IR
>
>
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.729 / Virus Database: 484 - Release Date: 27/07/2004

1042. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 13:13:05 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <icb2kderukl5.dlg@news.individual.net>
Source record: 91763
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 13:18:19 +0100, Paul Burridge wrote:

> On Sat, 31 Jul 2004 07:46:31 -0400, Activ8 <reply2group@ndbbm.net>
> wrote:
>
> The revelant snippet:
>
>>So, does anyone know of a simple graphical way to do it on the SC?"
>
>>So turn to page 106 and notice that an S param is plotted and if the
>>light and your eyes are good enough, you'll see that the point is
>>also labeled 2 + j1.5
>
> Well so?

So you replied before I could add to my last post, but...

> Since you think you know better than everyone else here,

I haven't contradicted anything that was said other than that which
you've said and no one has bothered to correct me on anything. Are
you also delusional? I should however take the opportunity to point
out that John Woodgate also mentioned that polar conversion, but he
did mention that it was for cartesian coords, which doesn't apply
to your current quandry.

notice that you alluded to using polar/rect conversions? That works
for finding going between admittance (mag, angle) and
conductance/suseptance. My head was still in the cartesian plane but
I can see why it didn't work for you.

BTW, I think if the data sheet gives Y params, I'd use 'em unless I
had another reason to convert to S-Params.

> perhaps you'd like to tell us how to convert this S-parameter, plotted
> on the chart as you say as 2+j1.5

2 + j1.5 is not an S-param it's a Y-param

> to its Y-parameter equivalent

You mean its reflection coefficient. Its magnitude is the length of
the line and its angle is, again, the angle. No conversion
necessary, it's a graphical solution. That's what you wanted and
that's what you got.

> without using the conversion formulas shown on P.107?

Did I say I could? ... Aside from my initial knee jerk polar/rect
conversion.

Those eqs look like the were derived from eqs for circles.

> For the
> avoidance of doubt: show us how you would derive the equivalent
> Y-parameter for 2+j1.5 by the use of the Chart alone.

You asked for a graphical solution and you got it. Twice or so.
>
>>I just did. Twice. Don't jump my ass just because what you heard is
>>not what you wanted to hear.
>
> I jumped on your "ass" because every follow-up you make lately seems
> to start with "Bullshit" and that's not a constructive way to
> contribute by any definiton.

No, only that one post and I had to use the term because you've had
enough time to memorize that book word for word and yet you insist
on confusing basic things with statements like:

"S-params are typically denoted in the form x+/-yj whereas the
Y-params are denoted as vector and angular co-ordinates"

Also, the post started with the abrev, "VB", not "bullshit".

>
>>> I start then I'd be grateful if you just kept your views to
>>> yourself. There was a time when I valued your input but it seems those
>>> days are over.
>>> 'Bye, Mike
>>
>>Then maybe I should charge you for my input.
>
> Fine. I'll send you a capacitor for the purpose. 1pF ought to cover
> it.

Well, at least you'll have attached *some* value to it. Do you think
I can use it to reduce the Miller capacitance seen at the base?
Hmmm... "cap", "charge", and "input" in 2 lines. Sounds like an
electronics discussion. I thought you said that wasn't allowed here
in sed.
--
Best Regards,
Mike

1043. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 14:03:05 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <kh9ng0ha91stolmsour18a3mi74b5nn1sm@4ax.com>
Source record: 91764

On Fri, 30 Jul 2004 12:45:53 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Sorry, I should have mentioned that. Most wall warts are poorly
>regulated, so one that's rated at 12 volts will commonly produce higher
>voltage at lower than its rated current, and anywhere from 15 to 18
>volts open circuit.

Yes, the adapter that shows 18 volts open circuit is showing 13+ volts
when I power up the 269. I think it should work fine.

Bob
k5qwg

>So a 12 volt wall wart with current rating well
>above what you'll be drawing (70-100 mA for a 15 hour AA NiCd charger)
>should work fine.
>
>Roy Lewallen, W7EL
>
>Bob Miller wrote:
>
>> . . .
>> That's interesting -- I just measured the MFJ-1312D wall wart, which
>> is rated at 12 vdc/500ma -- it measures close to 18 volts. The
>> instructions say the 269 will operate with any voltage between 11 and
>> 18, with 14.5v being ideal. . .

1044. Re: Question, charging batteries, MFJ-269 antenna analyzer

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 14:05:23 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <gl9ng01ju5ce3568nfsilhms8ouj9v8npt@4ax.com>
Source record: 91765

On Fri, 30 Jul 2004 20:05:15 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
>"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
>news:f23jg0dc86d6mdfsm844ab77p98qvsquo2@4ax.com...
>> On Thu, 29 Jul 2004 12:43:06 -0700, Roy Lewallen <w7el@eznec.com>
>> wrote:
>>
>> >I've seen a selection of "wall warts" at just about every flea market
>> >I've been to, and have added quite a few to my collection from various
>> >defunct and obsolete pieces of equipment. A lot of them put out 15 volts
>> >or so DC at a couple of hundred mA, which is what you need. If you don't
>> >want to wait for the next flea market, try Radio Shack or a radio or
>> >computer parts store like Fry's, or eBay. You might have to replace the
>> >connector with a compatible one, and be sure the polarity is correct.
>> >
>> >Roy Lewallen, W7EL
>>
>> ... thanks, Roy...
>>
>> bob
>> k5qwg
>>
>
> Bob
>
> If you decide to mahe your own charger, you might want to consider using a
>light bulb in series with the voltage source. That can be a way of limiting
>charging current.
>
> Since I dont know what kind of batteries are being charged, it is
>incorrect for me to advise anything about the charger.
>
> Jerry
>

Thanks, Jerry -- I'm trying to use the unit's internal charger, mainly
for convenience. I have to remove 8 screws to get at the rechargeable
batteries. I think the wall wart I have is going to work okay, the
more I look at it.

Bob
k5qwg

1045. Re: cell phone question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 14:08:16 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <410ba5f5.291421@news.galilei.com>
Source record: 91766

Hi Roy

I didn't know Iridian was low orbit satellite, I thought it was the bigger birds.

In the late 1960's I had a Motorola System in my car, darn thing took up most of my trunk space too.
At least we never had Dead Areas. Areas where we needed more power to get back to the station, but no dead areas to speak of, you could always hear along with the static of course.

My XYL at that time was a licensed ham also, so we could communicate at preset times when she would stand by the rig to see if I was calling her. It was just to expensive to make a call on the mobile phone. I just love the newer HTs of today with the coded tone squelch and the like, but my current XYL is not licensed and don't care to be either. I just can't get her interested in radio at all.

TTUL - 73+ de Gary - KG ZP

1046. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 14:33:29 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <fmang0t7fe8f7ebatbbvamamg7s927narg@4ax.com>
Source record: 91767
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 09:13:05 -0400, Activ8 <reply2group@ndbbm.net>
wrote:

[yet more unnecessary verbiage snipped]

So you could have saved a lot of bandwidth and me a lot of valuable
time by just simply stating "no it's not possible to perform a summary
translation between S and Y parameters by mappings on the Smith Chart"
and we could all have got on with our lives. Thanks for unnecessarily
dragging out the discussion yet adding nothing to it - oh and the
gratuitous insults as well, of course.

>>>Then maybe I should charge you for my input.
>>
>> Fine. I'll send you a capacitor for the purpose. 1pF ought to cover
>> it.
>
>Well, at least you'll have attached *some* value to it.

No. You misunderstand again. The charge (electrical charge geddit?) is
for *you* to put into it. The bill for my wasted time is in the mail.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

1047. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 14:36:28 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <M7OOc.2361$Je5.556@nwrddc03.gnilink.net>
Source record: 91768

"K7MEM" <k7mem@myrealbox.com> wrote in message
news:410B90E5.4020107@myrealbox.com...
> matt wilson wrote:
> > I have a 1.8m fibreglass rod from a 27Mhz whip, to which I have added
> > braiding to make a 1/4 wave at 52Mhz.
> >
> > Now, I still have a foot of glass left at the top and I'm interested in
> > making it resonant at 10m as well. I understand how to make traps for a
> > given frequency, but not how to calculate what that frequency should be
> > in the case of a non-resonant trap.
> >
> > As I understand it, a trap at resonance 'somewhere' between 29 and 52
> > Mhz can be added to a whip that will electrically lenghten it into
> > resonance at 10m, and electrically shorten it into resonance at 6m.
> >
> > What I don't understand is exactly how one calculates:
> > The traps own resonance
> > The equilant physical length of the trap at a given frequency, and
> > The lengths of the radiating segments, allowing for loading and mutual
> > coupling.
> >
> > I appreciate that some "real world" tweaking of the design is almost
> > always required, but how is the basic layout produced? Is it possible to
> > calculate in advance which combinations will work well and which won't?
>
> Well, you almost have it correct. The trap should resonate in the middle
> of the band you wish to operate. For example, if you wish to operate
> from 28 to 29 MHz you would resonate the trap at ~28.5 MHz.
>

Actually, you would want the trap to resonate at 6M thus providing a hi Z
and making the whip beyond the trap invisible.

> The idea behind the trap is that, at resonance, 28.5 MHz, it provides
> a low impedance to your signal and connects through to the extra wire
> that is past the trap. At 52 MHz the trap would present a high impedance
> and effectively isolate the extra wire from the rest of the antenna.
>
Actually, at 28MHz the trap will look inductive thus shortening the overall
length for 10M.

A much easier solution is to simply use an inductive choke at the top of the
6M section and then an appropriate tip to resonate the antenna on 10M. Reg
Edwards site provides the information for doing this- in the form of
inductively shortened dipoles. The program allows one to place the inductive

load anywhere along the wire.

Dale W4OP

1048. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 14:48:28 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <xpoJ8ND8E7CBFwby@jmwa.demon.co.uk>
Source record: 91769
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
wrote (in <icb2kderukl5.dlg@news.individual.net>) about 'S - Y Parameter
conversion with Smith Chart', on Sat, 31 Jul 2004:

>2 + j1.5 is not an S-param it's a Y-param

It's just a complex number. How can you tell what sort of parameter it
represents?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1049. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 15:04:55 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <HQ7NZ7FXU7CBFAuN@ifwtech.co.uk>
Source record: 91770

K7MEM wrote:
>matt wilson wrote:
>> I have a 1.8m fibreglass rod from a 27Mhz whip, to which I have added
>>braiding to make a 1/4 wave at 52Mhz.
>> Now, I still have a foot of glass left at the top and I'm
>>interested in making it resonant at 10m as well. I understand how to
>>make traps for a given frequency, but not how to calculate what that
>>frequency should be in the case of a non-resonant trap.
>> As I understand it, a trap at resonance 'somewhere' between 29 and
>>52 Mhz can be added to a whip that will electrically lenghten it into
>>resonance at 10m, and electrically shorten it into resonance at 6m.
>> What I don't understand is exactly how one calculates:
>> The traps own resonance
>> The equilant physical length of the trap at a given frequency, and
>> The lengths of the radiating segments, allowing for loading and
>>mutual coupling.
>> I appreciate that some "real world" tweaking of the design is
>>almost always required, but how is the basic layout produced? Is it
>>possible to calculate in advance which combinations will work well
>>and which won't?
>
>Well, you almost have it correct. The trap should resonate in the
>middle
>of the band you wish to operate.

Not always. Matt knows exactly what he's looking for - he really does mean a trap that is resonant *between* the two target bands!

The parallel L/C circuit will appear inductive on the lower band, so it makes the antenna electrically longer; while on the higher band it appears capacitive and makes the antenna electrically shorter. The trick is to work out how to make the whole antenna resonant on both bands simultaneously.

The original idea was in 'Ham Radio' several years ago:
Designing trap antennas: a new approach by Yardley Beers, W0JF Aug 87 p60

Unfortunately I don't have the reference itself, but maybe someone here has either the magazine or a CD?

This antenna is much harder to design than a conventional system with resonant traps, because no individual part of the antenna is resonant on either band. It needs either a lot of cut-and-try, or a little help from a computer.

There might have been a BASIC listing in the original article, but I'd
bet that Reg could knock together a program before bedtime :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1050. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 15:10:58 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <uo5xsdawvz9f.dlg@news.individual.net>
Source record: 91671
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 15:48:28 +0100, John Woodgate wrote:

> I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
> wrote (in <icb2kderukl5.dlg@news.individual.net>) about 'S - Y Parameter
> conversion with Smith Chart', on Sat, 31 Jul 2004:
>
>>2 + j1.5 is not an S-param it's a Y-param
>
> It's just a complex number. How can you tell what sort of parameter it
> represents?

Ok. I can see it's not an s-param and the number were discussing
just happens to be a Z in the text, not a Y.
--
Best Regards,
Mike

1051. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 15:20:05 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <FMOOc.58081$8_6.46144@attbi_s04>
Source record: 91672

Thanks Chip for taking the time to keep the rest of us up to date.
I appreciate the sharing of info
Regards
Art

"Fractenna" <fractenna@aol.com> wrote in message
news:20040731081904.04588.00002232@mb-m10.aol.com...
>
>
> Mr. Robert Vincent's/ University of Rhode island (URI) "revolutionary,
new"
> DLM antenna technology has experienced some public informational updates.
In
> particular, I suggest the following URL:
>
> http://www.uri.edu/research/tro/NCD_for_Tape,_040604.html
>
> As I have stated previously, I am of the opinion that the issue of 'new'
and
> 'revolutionary' may not be accurate when considering the prior art
relative to
> Mr. Vincents' 'DLM antenna technology'. In support of this, I have
purchased an
> antenna which appears to be predominantly marketed to CB'ers and truckers,
> although it also can be used by hams. The manufacturer's statements
closely
> match Mr Vincent's claims with respect to efficiency, bandwidth, and size.
It
> is not the Midland antenna I alluded to earlier. As the company has had
the
> product out for several years--according to the sales department-- it is
> unlikely to be a licensed Vincent DLM antenna (many years is not 'new').
The
> manufacturer appears to represent the antenna realistically, in my
opinion, and
> does not pose it as 'revolutionary', to my knowledge. Instead, the
manufacturer
> has apparently found an appropriate niche with CB truckers.
>
> I will provide additional information coinciding with the oral public
> discussion of the Vincent DLM antenna in mid-August. I will personally
conduct
> range measurements on this commercially available antenna--which is
clearly a

> distributed-load monopole. This is a technical fact: It is loaded, and it
is
> not contunuously loaded: the load is distributed. I have already secured a
URL
> for reporting these results, if needed.
>
> It is important at this point to understand that Mr. Vincent's claims of
'wide
> in bandwidth' allude to 3-5%. In comparison, a dipole exceeds this value.
Most
> skilled in the art would not refer to 3-5% bandwidths as wideband. It is
also
> important to understand that antenna(s) with similar claims of similar
> bandwidth, at high efficiency, and 1/3 the regular size is (are) available
on
> the commercial market. It will be interesting to see if the Vincent DLM
antenna
> technology is better than something else already available to CB'ers, for
> example. I am of the opinion that this will not prove to be so.
>
>
> 73,
> Chip N1IR
>
>
>
>

1052. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 15:30:38 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1ooy0jvfs08d0.dlg@news.individual.net>
Source record: 91673
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 15:33:29 +0100, Paul Burridge wrote:

> On Sat, 31 Jul 2004 09:13:05 -0400, Activ8 <reply2group@ndbbm.net>
> wrote:
>
> [yet more unnecessary verbiage snipped]

Ok. from now on I'll just say you're out to lunch without bothering
to point out where or why.
>
> So you could have saved a lot of bandwidth and me a lot of valuable
> time

That's the pot calling the kettle black. Aside from the need for
others to repeatedly spell things out for you, you're also the guy
who braged about the record setting flame war you had with some
dude. I don't suppose yuo consider that a waste of bandwidth. Don't
add hypocrisy to your transgressionsl.

> by just simply stating "no it's not possible to perform a summary
> translation between S and Y parameters by mappings on the Smith Chart"

But for the third time, it is. The eqs are for getting a *numerical*
answer. If you have the chart, you just read the conversion off of
it directly. Start with the example on pg 105.

That's three (or so) times I've told you and yet you can't
understand why people tire of your lack of understanding.

> and we could all have got on with our lives.

Didn't know you had one ;) ... couldn't resist.

> Thanks for unnecessarily
> dragging out the discussion yet adding nothing to it

Ok. You're right. I added nothing. It was all bs. You *can't* do it
on the SC and you *must* use the conversion formulas. Happy now?
Bowick and I are both wrong.

> - oh and the
> gratuitous insults as well, of course.

>>>>Then maybe I should charge you for my input.
>>>
>>> Fine. I'll send you a capacitor for the purpose. 1pF ought to cover
>>> it.

>>
>>Well, at least you'll have attached *some* value to it.
>
> No. You misunderstand again. The charge (electrical charge geddit?)

But you said we can't discuss electronics in this forum.

> is
> for *you* to put into it. The bill for my wasted time is in the mail.

If you want to avoid wasting time, take up wood working.

--
Best Regards,
Mike

1053. Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 15:37:24 UTC
From: Bob Dalton <bdalton@msn.com>
Message-ID: <357b43aa75650c9df76857c0a3c4cac7@news.bubbanews.com>
Source record: 91674
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

I'm thinking about putting a mag mount antenna on my car. But I have heard that they really don't work. Someone said that because of the magnet their isn't any capacitive coupling for the RF ground. Is that true? So a mag mount would work just as well if I set it on my picnic table? Also, does the coax attached to it as a ground? If I change the length of the coax, will a mag mount quit working?

Thanks.

1054. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 16:45:53 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <51QOc.1570$uk3.905@trndny06>
Source record: 91675
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I enjoy reading this group, mostly for short sweet questions with short sweet answers. I take the time to sort through all of the questions and all of the responses in a thread because if I can't offer some advice, then maybe I'll learn something. In this case, I feel my time is wasted by both of you because there's nothing I can offer to this purely emotional exchange, and nothing I can learn from what's being offered. I think the majority of the readers probably feel the same.

Can you guys take this to a more private venue please??

Joe
W3JDR

"Activ8" <reply2group@ndbbm.net> wrote in message
news:1ooy0jvfs08d0.dlg@news.individual.net...
> On Sat, 31 Jul 2004 15:33:29 +0100, Paul Burridge wrote:
>
> > On Sat, 31 Jul 2004 09:13:05 -0400, Activ8 <reply2group@ndbbm.net>
> > wrote:
> >
> > [yet more unnecessary verbiage snipped]
>
> Ok. from now on I'll just say you're out to lunch without bothering
> to point out where or why.
> >
> > So you could have saved a lot of bandwidth and me a lot of valuable
> > time
>
> That's the pot calling the kettle black. Aside from the need for
> others to repeatedly spell things out for you, you're also the guy
> who braged about the record setting flame war you had with some
> dude. I don't suppose yuo consider that a waste of bandwidth. Don't
> add hypocrisy to your transgressionsl.
>
> > by just simply stating "no it's not possible to perform a summary
> > translation between S and Y parameters by mappings on the Smith Chart"
>
> But for the third time, it is. The eqs are for getting a *numerical*
> answer. If you have the chart, you just read the conversion off of
> it directly. Start with the example on pg 105.
>
> That's three (or so) times I've told you and yet you can't
> understand why people tire of your lack of understanding.
>

> > and we could all have got on with our lives.
>
> Didn't know you had one ;) ... couldn't resist.
>
> > Thanks for unnecessarily
> > dragging out the discussion yet adding nothing to it
>
> Ok. You're right. I added nothing. It was all bs. You *can't* do it
> on the SC and you *must* use the conversion formulas. Happy now?
> Bowick and I are both wrong.
>
> > - oh and the
> > gratuitous insults as well, of course.
>
> >>>>Then maybe I should charge you for my input.
> >>>
> >>> Fine. I'll send you a capacitor for the purpose. 1pF ought to cover
> >>> it.
> >>
> >>Well, at least you'll have attached *some* value to it.
> >
> > No. You misunderstand again. The charge (electrical charge geddit?)
>
> But you said we can't discuss electronics in this forum.
>
> > is
> > for *you* to put into it. The bill for my wasted time is in the mail.
>
> If you want to avoid wasting time, take up wood working.
>
> --
> Best Regards,
> Mike

1055. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 17:03:10 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <410BD0CE.5040108@myrealbox.com>
Source record: 91677

Dale Parfitt wrote:
> "K7MEM" <k7mem@myrealbox.com> wrote in message
> news:410B90E5.4020107@myrealbox.com...
>
>>matt wilson wrote:
>>
>>>I have a 1.8m fibreglass rod from a 27Mhz whip, to which I have added
>>>braiding to make a 1/4 wave at 52Mhz.
>>>
>>>Now, I still have a foot of glass left at the top and I'm interested in
>>>making it resonant at 10m as well. I understand how to make traps for a
>>>given frequency, but not how to calculate what that frequency should be
>>>in the case of a non-resonant trap.
>>>
>>>As I understand it, a trap at resonance 'somewhere' between 29 and 52
>>>Mhz can be added to a whip that will electrically lenghten it into
>>>resonance at 10m, and electrically shorten it into resonance at 6m.
>>>
>>>What I don't understand is exactly how one calculates:
>>>The traps own resonance
>>>The equilant physical length of the trap at a given frequency, and
>>>The lengths of the radiating segments, allowing for loading and mutual
>>>coupling.
>>>
>>>I appreciate that some "real world" tweaking of the design is almost
>>>always required, but how is the basic layout produced? Is it possible to
>>>calculate in advance which combinations will work well and which won't?
>>
>>Well, you almost have it correct. The trap should resonate in the middle
>>of the band you wish to operate. For example, if you wish to operate
>>from 28 to 29 MHz you would resonate the trap at ~28.5 MHz.
>>
> Actually, you would want the trap to resonate at 6M thus providing a hi Z
> and making the whip beyond the trap invisible.

Yea, I guess that the way it goes. I always get that part mixed up. It's
been a while since I built one so I'll have to go back over my notes.
I have previously built a trap dipole for 10, 15, 20, and 40 Meters and
a vertical for 10, 15, and 20 Meters. They both worked great, but I just
don't remember the exact order of things. That's what happens when you
get old I guess. :-)

>>The idea behind the trap is that, at resonance, 28.5 MHz, it provides
>>a low impedance to your signal and connects through to the extra wire
>>that is past the trap. At 52 MHz the trap would present a high impedance

>>and effectively isolate the extra wire from the rest of the antenna.
>>
>
> Actually, at 28MHz the trap will look inductive thus shortening the overall
> length for 10M.

Yea, I mention that further down the post, but you clipped it off.

> A much easier solution is to simply use an inductive choke at the top of the
> 6M section and then an appropriate tip to resonate the antenna on 10M. Reg
> Edwards site provides the information for doing this- in the form of
> inductively shortened dipoles. The program allows one to place the inductive
> load anywhere along the wire.

??? Wouldn't that just make it usable on 10 Meters only? I thought he
wanted to use it on 6 and 10 Meters. Maybe I read something wrong.

I'll have to look up the article that Ian references. He seems to have
a better idea of what Matt is looking for.

p.s. Every time I post some spambot out there tries to send me some junk
mail. I don't have any real problem with that because they all get
filtered out, however, with this last post they tries to send me a
email with a virus in it. It doesn't cause me a problem because
all my email is scanned and the virus was removed before it ever
got to me. But be aware that it is out there.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

1056. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 17:07:49 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <4$+rZkDIH9CBFwbH@jmwa.demon.co.uk>
Source record: 91676
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
wrote (in <uo5xsdawvz9f.dlg@news.individual.net>) about 'S - Y Parameter
conversion with Smith Chart', on Sat, 31 Jul 2004:

>I can see it's not an s-param

I was asking HOW you can see that. Do you have selective spectacles,
tuned to s-parameter expressions?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1057. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 17:26:32 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <gdhng01ur49gdthptppj695kqg071ssa5e@4ax.com>
Source record: 91678

On Fri, 30 Jul 2004 17:54:09 GMT, "John D" <jawnd393@yahoo.com> wrote:

>I'm a new ham and this will be used for my first antenna.
>
>I have 97 ft of twinlead that I think might be 75 ohm but there is no
>identifying label on it.
>I have searched the web and can't find any information on 75 ohm twinlead.
>Can anyone identify this wire from these dimensions?
>
>Conductors about 28 AWG. (7 strand of #34 or 35) .
>Separated about 1/4 inch apart.

My Radio Shack "300-ohm" folded dipole for FM broadcast has twinlead
about 1/4-inch apart. Probably closer to 300 ohms than 75.

Bob
k5qwg

>Width overall .361" x .125 or (almost 3/8)"
>Thickness overall 1/8"
>Web thickness .035"
>Each wire has some white insulation around it and the outer twinlead shaped
>insulation is black
>
>This wire is very light and I want to use it to feed a HF dipole with no
>center support.
>My maximum power is 200 watts.
>John
>

1058. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 17:29:29 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1hv1lz9ljgo3f$.dlg@news.individual.net>
Source record: 91679
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 18:07:49 +0100, John Woodgate wrote:

> I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
> wrote (in <uo5xsdawvz9f.dlg@news.individual.net>) about 'S - Y Parameter
> conversion with Smith Chart', on Sat, 31 Jul 2004:
>
>>I can see it's not an s-param
>
> I was asking HOW you can see that. Do you have selective spectacles,
> tuned to s-parameter expressions?

Just because s-params are in mag <ang format and not in a + jb . At
least I've never seen tham that way. Furthermore, I know exactly
what PB is referring to, in case you didn't notice the page number
refs.

Yeah. I'm on hold here, so I haven't left yet. Delays.
--
Best Regards,
Mike

1059. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 17:42:31 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <16m2bj4d1it0r$.dlg@news.individual.net>
Source record: 91680
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 16:45:53 GMT, W3JDR wrote:

> I enjoy reading this group, mostly for short sweet questions with short
> sweet answers. I take the time to sort through all of the questions and all
> of the responses in a thread because if I can't offer some advice, then
> maybe I'll learn something. In this case, I feel my time is wasted by both
> of you because there's nothing I can offer to this purely emotional
> exchange, >

Uh. I gave good info and am trying to drill it home. Paul doesn't
like being chided. TFB.

> and nothing I can learn from what's being offered. I think the
> majority of the readers probably feel the same.
>
> Can you guys take this to a more private venue please??
>
> Joe
> W3JDR

Which group? I could take out the x-posts ;) I forgot that and fully
realize that some groups aren't used to this stuff. Maybe I should
go there more often. I've found the amature groups to be quite good,
not that sed is bad. Check it out sometime :)

--
Best Regards,
Mike

1060. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 17:58:23 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <410BDDD6.FE02CDB2@shaw.ca>
Source record: 91681
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Bob Dalton wrote:
>
> I'm thinking about putting a mag mount antenna on my car. But I
> have heard that they really don't work. Someone said that because of
> the magnet their isn't any capacitive coupling for the RF ground. Is
> that true? So a mag mount would work just as well if I set it on my
> picnic table? Also, does the coax attached to it as a ground? If I
> change the length of the coax, will a mag mount quit working?
>
> Thanks.

If such were the case (that they really don't work) there are a lot of
us who would not be communicating. :-)

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1061. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 18:08:49 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <n2nng0hvjmgl5ljj1li87onra4sgt0pd97@4ax.com>
Source record: 91682
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 11:30:38 -0400, Activ8 <reply2group@ndbbm.net>
wrote:

>On Sat, 31 Jul 2004 15:33:29 +0100, Paul Burridge wrote:
>
>> On Sat, 31 Jul 2004 09:13:05 -0400, Activ8 <reply2group@ndbbm.net>
>> wrote:
>>
>> [yet more unnecessary verbiage snipped]
>
>Ok. from now on I'll just say you're out to lunch without bothering
>to point out where or why.

Why not go one step further and not bother to say anything at all?

>That's the pot calling the kettle black. Aside from the need for
>others to repeatedly spell things out for you, you're also the guy
>who braged about the record setting flame war you had with some
>dude. I don't suppose yuo consider that a waste of bandwidth. Don't
>add hypocrisy to your transgressionsl.

You know nothing whatsoever of the nature of that thread and my input
to it. On that particular forum, my input was instrumental in
assisting an innocent person to defend his hard-won real-world
reputation against malicious allegations made over the Internet. It
cost the transgressor half a million pounds in damages, thanks in no
small part to my guidance and support in an area of expertise in which
I *do* unquestionably excell. I'm not here to dish out advice, I'm
here to try to learn something about a subject I'm not fully
conversant with.

>> by just simply stating "no it's not possible to perform a summary
>> translation between S and Y parameters by mappings on the Smith Chart"
>
>But for the third time, it is.

For at least the *fourth* time, it isn't!

>The eqs are for getting a *numerical*
>answer. If you have the chart, you just read the conversion off of
>it directly. Start with the example on pg 105.

Nope. The example on p.105 is nothing to do with converting between S
and Y parameters; it simply demonstrates a graphical method for
expressing a normalised load impedance in the form x +/-jy as a
reflection coefficient in terms of a magnitude and angle; that's all.

And as John W said, how do you tell whether the point referred to on the Chart is actually a Y-parameter at all??

>That's three (or so) times I've told you and yet you can't
>understand why people tire of your lack of understanding.

Some people have a gift for expressing themselves lucidly. Roy's single, concise posting was an example of that craft. You have demonstrated nothing of that calibre.

>> and we could all have got on with our lives.
>
>Didn't know you had one ;) ... couldn't resist.

I do, but it's x years minus 1 day thanks to your obfuscation.

>Ok. You're right. I added nothing. It was all bs. You *can't* do it
>on the SC and you *must* use the conversion formulas. Happy now?
>Bowick and I are both wrong.

I didn't say Bowick was wrong. I never said that Bowick stated it was possible to make the conversion solely by means of the graph. You, OTOH, still say that.

--

"What is now proved was once only imagin'd." - William Blake, 1793.

1062. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 18:10:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pgmng09fi0qjt0app4s3qakrdfdi9s92dg@4ax.com>
Source record: 91683
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Sat, 31 Jul 2004 15:37:24 GMT, Bob Dalton <bdalton@msn.com> wrote:

> I'm thinking about putting a mag mount antenna on my car. But I
>have heard that they really don't work. Someone said that because of
>the magnet their isn't any capacitive coupling for the RF ground. Is
>that true? So a mag mount would work just as well if I set it on my
>picnic table? Also, does the coax attached to it as a ground? If I
>change the length of the coax, will a mag mount quit working?
>
>Thanks.

Hi Bob,

Many claims are made for mag-mounts that just don't stand the test of common sense. The capacitive coupling is one of them. Too often this claim is taken on faith.

This is not to say all models are faith based however.

Testing will undoubtedly reveal that the mag-mount will match to the transmitter, but again, this says nothing of the performance of communication.

The faith based arguments have the mount base being the plate of the capacitor meeting the plate of the chassis. I have yet to hear this analysis being examined by peeling away all the extraneous layers to reveal this plate.

The faith based arguers throw up their hands and insist "it must be there! otherwise the antenna wouldn't work!"

Such arguments are then dashed against the rocks when past mag mount users offer reports that when they replaced them with true metallic connected antennas, those antennas outperform the mag mounts.

Aside from the conflicting evidence of probable poorer efficiency, the necessary capacitive coupling from this presumed plate then requires that it have leads, which must in turn lead back through the path of chassis metal to reach up the cable to the opposite plate. Faith based arguments quickly collapse when pressed to this consideration.

Another failure of the faith based argument of the plate in the mount is found through its redundancy to already existing capacitance in the cable leading up to the mag mount. A six foot coaxial cable feeding the mag mount, when tightly, mechanically coupled to the chassis through simple routing paths to the mount, also are tightly,

capacitively coupled and would exhibit just as much, if not more capacitance than could be attributed to the plate presumed to be in the mount.

Setting the mag mount on a picnic table would seem to be an exercise in failure. The common away-from-car advise is to mount it atop a cookie sheet. Testing is advised in other words, and this includes testing against a true, metallic connected antenna. However, if you had that opportunity, you would do well to simply mount the metallic connected antenna and enjoy talking on the radio. To answer your other question about changing the length and performance going to hell. This characteristic in itself suggests you be on top of the required lengths and combination of such influences, or toss that air cooled resistor.

73's
Richard Clark, KB7QHC

1063. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 18:24:52 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <CtaFdtE0P+CBFws4@jmwa.demon.co.uk>
Source record: 91684
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote (in <n2nng0hvjmgl5ljj1li87onra4sgt0p
d97@4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on
Sat, 31 Jul 2004:
>And as John W said, how do you tell whether the point referred to on the
>Chart is actually a Y-parameter at all??

No, I didn't say that. Please refrain from citing me in support of your
inanities.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1064. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 18:28:48 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <btPDN4EgT+CBFwv2@jmwa.demon.co.uk>
Source record: 91685
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
wrote (in <1hv1lz9ljgo3f$.dlg@news.individual.net>) about 'S - Y
Parameter conversion with Smith Chart', on Sat, 31 Jul 2004:
>On Sat, 31 Jul 2004 18:07:49 +0100, John Woodgate wrote:
>
>> I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
>> wrote (in <uo5xsdawvz9f.dlg@news.individual.net>) about 'S - Y Parameter
>> conversion with Smith Chart', on Sat, 31 Jul 2004:
>>
>>>I can see it's not an s-param
>>
>> I was asking HOW you can see that. Do you have selective spectacles,
>> tuned to s-parameter expressions?
>
>Just because s-params are in mag <ang format and not in a + jb . At
>least I've never seen tham that way.

I asked purely for information. It might have been that there are limits
on the values that the various parameters can take, and that example was
outside the limits for an s-parameter.

>Furthermore, I know exactly what PB
>is referring to, in case you didn't notice the page number refs.

I noticed that, but I, and doubtless many others, don't have the book.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1065. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 19:28:51 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <TpSOc.64250$eM2.35002@attbi_s51>
Source record: 91686

Here is a telling quote from the URL cited:

QUOTE:
Recently a 9-inch DLM operating in the 150 MHz marine and business band out performed an Antenna Specialist 5/8-wave antenna with a total height of 54 inches. Besides matching the radiating level of the AS 5/8 wave antenna it also exceeded the AS antenna bandwidth by 1 MHz. The test was conducted on a 4-foot square ground planes system, which emulated a typical installation. (Vehicle roof top etc.) To verify that the test were conducted on a level playing field the 5/8 wave antenna was measured against a quarter-wave vertical radiator matched for a 1:1 swr and it did exhibit 3 dB gain over the quarter wave antenna. The DLM was then mounted on the same ground plane system and nothing was changed.
UNQUOTE

So what he seems to be saying is that his antenna outperformed a 5/8 wave antenna which in turn outperformed a 1/4 wave vertical by 3 dB. Thus, he has in essence claimed 3 dB gain over a 1/4 wave vertical. There is simply NO WAY this can be correct, unless the small ground plane just accidentally helped one antenna and hurt the other. Or maybe THE FEEDLINE WAS RADIATING.
Hmm, where have I run into that before? The CFA maybe.

Rick N6RK

1066. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 20:34:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cegvp8gpk1@hercules.btinternet.com>
Source record: 91687
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

The Smith Chart has served its purpose.

It was a much-simplified version of earlier, more complicated charts, dating back to the Victorian age used to solve electrical engineering problems involving complex hyperbolic functions.

It applied ONLY to the HF spectrum, serious calculating errors occurr if applied to the LF spectrum and below although few engineers realised this. And still don't.

But it became popular with design engineers immediately following its introduction in the late 1930's when HF broadcasting, TV and Radar, and relatively short, low-loss HF transmission lines became the vogue.

The design and use of HF and VHF lines was much further accelerated during WW2 when all the principal participating nations indulged in vitally-urgent, secret work associated with VHF communications and Radar. The Smith Chart became available just at the right time. It could almost be considered as a war weapon used by all sides.

But it became reduntant just as rapidly on the invention of the scientific pocket calculator. In particular calculators which had hyperbolic functions. The pocket calculator could now, much more easily, with equal facility, undertake transmission line calculations involving the whole of the frequency spectrum from DC upwards.

It is said that, these days, the Smith Chart has eductional value. It allows problems to be visualised. Indeed it does. But there are other just as good educational methods which involve mathematical procedures.

My first association with transmission lines was in 1944/5. I have never used a Smith chart in the whole of my career. Neither have I ever met anyone who has. Perhaps I haven't met many people.

The Smith Chart, as sentimental and as nostalgic as it may be, is redundant.

Reg.

1067. Two slim jims in one pvc tube???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 20:39:59 UTC
From: Luc <luco53@hotmail.com>
Message-ID: <410c03a3$0$31050$ee9da40f@news.wanadoo.nl>
Source record: 91688

I have planned to build a slim jim antenna for the marine VHF (about 160 MHz) band and to put it into a weather resistant pvc tube.
In fact I need another one for 422 MHz band. Both will be used for reception purposes only.

My question is: is it posible to combine these two antennas in just one tube, so that they don't disturb each other??? The antenna design is conform described at
http://www.ha.cz/a_spionaz/urobsisam/radio/doc/tech.htm#Siting

If not, what is the minimum (horizontal/vertical) distance needed between the two slim jim tubes in the mast?
And also, what is the best method to mount the slim jim tube to the mast?

Thanks in advance!

Luc

1068. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 20:47:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <KzTOc.354$774.262@bignews6.bellsouth.net>
Source record: 91689
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Yep, most of them work fine.
I took one apart once at the mag-mount
The one I took apart had a thin plate between the magnet and the car which
was soldered to the braid.
The capacitive coupling worked fine for 2meters and 10 meters.
I haven't tried a mag-mount for lower freqs - so I can't address those.

"Bob Dalton" <bdalton@msn.com> wrote in message
news:357b43aa75650c9df76857c0a3c4cac7@news.bubbanews.com...
> I'm thinking about putting a mag mount antenna on my car. But I
> have heard that they really don't work. Someone said that because of
> the magnet their isn't any capacitive coupling for the RF ground. Is
> that true? So a mag mount would work just as well if I set it on my
> picnic table? Also, does the coax attached to it as a ground? If I
> change the length of the coax, will a mag mount quit working?
>
> Thanks.

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1069. Re: 2M homemade colinear designs?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 21:05:12 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <6QTOc.485$vp.170@bignews2.bellsouth.net>
Source record: 91690

Like the design. and it looks good too.

I tried a similar setup trying to space the elements 1/2-wave apart.
I Couldn't get it quite right because 1/2-wave in air was farther apart than 1/2-wave coax between the elements - because of the velocity factor of the coax.
(i guess I could have made the stubs between elements 1-1/2 wavelengths, but the simplicity of the design would have been lost.)
How far apart was the spacing of your elements in your colinear ?

"Ross Anderson" <ross_anderson@comcast.net> wrote in message news:1cb0099f.0407262144.76038747@posting.google.com...
> Hi Larry
>
> Here is a simple colinear I designed for 2 meters.
>
> http://home.comcast.net/~ross_anderson/sc.htm
>
> Ross W1HBQ
>
> Larry Gagnon <lagagnon@fakeuniserve.com> wrote in message news:<pan.2004.06.26.22.56.04.291812@fakeuniserve.com>...
> > Am looking for some links to homebrew designs for a base station 2M
> > colinear (two stacked 5/8 wave type). I prefer something simple made from
> > PVC and wire. Any ideas considered.
> >
> > Larry VE7EA

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1070. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 21:21:15 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <fo1og09jrnl76i1rq51t94nqan0qull312@4ax.com>
Source record: 91691

On Sat, 31 Jul 2004 20:34:48 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The Smith Chart has served its purpose.
>
>It was a much-simplified version of earlier, more complicated charts, dating
>back to the Victorian age used to solve electrical engineering problems
>involving complex hyperbolic functions.
>
>It applied ONLY to the HF spectrum, serious calculating errors occurr if
>applied to the LF spectrum and below although few engineers realised this.
>And still don't.
>
>But it became popular with design engineers immediately following its
>introduction in the late 1930's when HF broadcasting, TV and Radar, and
>relatively short, low-loss HF transmission lines became the vogue.
>
>The design and use of HF and VHF lines was much further accelerated during
>WW2 when all the principal participating nations indulged in vitally-urgent,
>secret work associated with VHF communications and Radar. The Smith Chart
>became available just at the right time. It could almost be considered as a
>war weapon used by all sides.
>
>But it became reduntant just as rapidly on the invention of the scientific
>pocket calculator. In particular calculators which had hyperbolic functions.
>The pocket calculator could now, much more easily, with equal facility,
>undertake transmission line calculations involving the whole of the
>frequency spectrum from DC upwards.
>
>It is said that, these days, the Smith Chart has eductional value. It allows
>problems to be visualised. Indeed it does. But there are other just as good
>educational methods which involve mathematical procedures.
>
>My first association with transmission lines was in 1944/5. I have never
>used a Smith chart in the whole of my career. Neither have I ever met anyone
>who has. Perhaps I haven't met many people.
>
>The Smith Chart, as sentimental and as nostalgic as it may be, is redundant.
>----
>Reg.
>
Well, Reg, with all the modern methods of calculation now available, the Smith
Chart may have outgrown its primary usefulness for this Century, However, I
take pride in having used it as the then only method of obtaining quick

solutions to antenna-transmission line matching problems that I faced when developing the antenna systems for the World's first weather satellite, TIROS 1 in the late 1950's. There also were no hand calculators then--I had only my K&E log log decitrig slide rule. What's more, I had no fancy digital machinery for measuring impedances at VHF and UHF like those available today. I was limited to making hundreds of measurements with only a slotted line and a SWR indicator. Yes, Reg, the SWR and the distance from the load to the minimum voltage point on the line was the only procedure available then for making complex impedance measurements. Don't ever think that SWR is unimportant, as you have asserted many times. In my case then it was vital to obtaining the measurements. The Smith Chart was then the only means for transferring the SWR and null distance into useable impedance data.

In addition, if a problem arises for which there is no calculator program immediately available, the good ole' Smith Chart provides a quick solution. When I'm at my problem-solving location my hand calculators are within arm's reach, but my Smith Chart is never more than five feet away. Are you aware of the JIC principle? I call it 'just in case'. My Smith Chart is my JIC. You may call it my security blanket if you like.

Walt, W2DU

1071. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 21:22:17 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <tDku22FJ2ADBFwiQ@jmwa.demon.co.uk>
Source record: 91692
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> wrote (in <cegvp8gpk1@hercules.btintern
et.com>) about 'S - Y Parameter conversion with Smith Chart', on Sat, 31
Jul 2004:

>It applied ONLY to the HF spectrum, serious calculating errors occurr if
>applied to the LF spectrum and below although few engineers realised
>this. And still don't.

Could you please explain that a bit more? The chart is a graphical way
of doing mathematics. Where does frequency enter the picture?

If you mean that the characteristic impedances of 'transmission lines'
at low frequencies aren't resistive, I quite agree.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1072. Re: make 50 ohm cable from 75 ohm cable?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 21:30:01 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <nbUOc.505$vp.83@bignews2.bellsouth.net>
Source record: 91693

Idea is use it as-is. (If you are ok with swr of 1.5)

"Dan Jacobson" <jidanni@jidanni.org> wrote in message
news:873c3e9l45.fsf@jidanni.org...
> From the cable TV company's garbage pile, one has access to tons of 75
> ohm line. But one wants to make a 40 meter long 50 ohm cable. Ideas?

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1073. a jinpole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 21:38:06 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410c1142@news.vo.lu>
Source record: 91694

Hi,

Unusual images...

Here is what happens when your jin-pole breaks at 10m high when you try to
install the last segment of your pylon.
http://www.astrosurf.com/lombry/jin-pole-breaking.htm (with comments)

Images available on this link for a few weeks only.

Document under copyright. Please do not reproduce under any format.

73
Thierry

1074. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 21:45:49 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <oh4og0d6dh8lj6rqgbks5k44gonil7dk64@4ax.com>
Source record: 91695
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 20:34:48 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The Smith Chart has served its purpose.
>
>It was a much-simplified version of earlier, more complicated charts, dating
>back to the Victorian age used to solve electrical engineering problems
>involving complex hyperbolic functions.
>
>It applied ONLY to the HF spectrum, serious calculating errors occurr if
>applied to the LF spectrum and below although few engineers realised this.

What's the cutoff frequency below which a Smith Chart won't work?

John

1075. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 22:06:45 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <410C17F5.10006@myrealbox.com>
Source record: 91696
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Bob Dalton wrote:
> I'm thinking about putting a mag mount antenna on my car. But I
> have heard that they really don't work. Someone said that because of
> the magnet their isn't any capacitive coupling for the RF ground. Is
> that true? So a mag mount would work just as well if I set it on my
> picnic table? Also, does the coax attached to it as a ground? If I
> change the length of the coax, will a mag mount quit working?
>
> Thanks.

Most people agree that they work but are usually at odds over
how well they work. One can only give a personal account of their
use.

During the last sunspot cycle, I ran a Radio Shack HTX-100 on 10
Meters. I used a mag-mount, also from Radio Shack, that was only
3 Ft high and was base loaded. It had about 10 ft of RG-58 on it
and was very easy to adjust. The antenna was stuck to the "air foil"
on the back of the trunk lid on a 1989 Firebird.

While driving the roads of Phoenix Arizona, I was always able to
hit the mid-west and occasionally the east coast. All of the
contacts were solid copy and I did it on the 5 watts and 35 watts.

So I would say that they work.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

1076. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 22:39:39 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1b75bf6eceae34779896f0@news-central.giganews.com>
Source record: 91697
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

In article <cegvp8gpk1@hercules.btinternet.com>,
g4fgq.regp@ZZZbtinternet.com says...

> It applied ONLY to the HF spectrum, serious calculating errors occurr if
> applied to the LF spectrum and below although few engineers realised this.
> And still don't.

Major employers, especially those with government contracts, require
pre-employment drug testing these days. Maybe that's why few engineers
think Smith charts somehow become invalid below a certain frequency.
Your mileage, obviously, has varied. :-P

> My first association with transmission lines was in 1944/5. I have never
> used a Smith chart in the whole of my career. Neither have I ever met anyone
> who has. Perhaps I haven't met many people.

Or used a VNA?

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

1077. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 22:43:00 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <lu7og0pa1m3of9cr4h1u58ict3g5rm3fub@4ax.com>
Source record: 91698
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 22:22:17 +0100, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>I read in sci.electronics.design that Reg Edwards
><g4fgq.regp@ZZZbtinternet.com> wrote (in <cegvp8gpk1@hercules.btintern
>et.com>) about 'S - Y Parameter conversion with Smith Chart', on Sat, 31
>Jul 2004:
>
>>It applied ONLY to the HF spectrum, serious calculating errors occurr if
>>applied to the LF spectrum and below although few engineers realised
>>this. And still don't.
>
>Could you please explain that a bit more? The chart is a graphical way
>of doing mathematics. Where does frequency enter the picture?

Perhaps Reg can also tell us in which year since the Chart's inception
the mathematical relationship between a graphical solution to a
computation and a numerical one broke down?
--

"What is now proved was once only imagin'd." - William Blake, 1793.

1078. Re: a jinpole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 22:43:50 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <GgVOc.21552$iK.15272@newsread2.news.atl.earthlink.net>
Source record: 91699

> Here is what happens when your jin-pole breaks at 10m high when you try to
> install the last segment of your pylon.
> http://www.astrosurf.com/lombry/jin-pole-breaking.htm (with comments)
>
> Images available on this link for a few weeks only.
>
> Document under copyright. Please do not reproduce under any format.
>
> 73
> Thierry
>

Hard to say from the pix but a good gin pole will have the rope ran up the
bottom of the pipe and over a pully at the top. If the pole breaks or bends
the tower section will still be supported by the rope and will not fall to
the ground.

1079. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 22:48:04 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <h88og09ghr7akdunlmrbmje43n7j1u35li@4ax.com>
Source record: 91700
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 19:24:52 +0100, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>I read in sci.electronics.design that Paul Burridge
><pb@notthisbit.osiris1.co.uk> wrote (in <n2nng0hvjmgl5ljj1li87onra4sgt0p
>d97@4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on
>Sat, 31 Jul 2004:
>>And as John W said, how do you tell whether the point referred to on the
>>Chart is actually a Y-parameter at all??
>
>No, I didn't say that. Please refrain from citing me in support of your
>inanities.

Sorry John. I didn't mean to imply I was investing any faith in your
all-too-frequently incorrect assertions.
HTH.

--

"What is now proved was once only imagin'd." - William Blake, 1793.

1080. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 22:49:27 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <2b8og0hsc4o51qmklqb5pr141pf64tce4a@4ax.com>
Source record: 91701
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 13:42:31 -0400, Activ8 <reply2group@ndbbm.net>
wrote:

>On Sat, 31 Jul 2004 16:45:53 GMT, W3JDR wrote:
>
>> I enjoy reading this group, mostly for short sweet questions with short
>> sweet answers. I take the time to sort through all of the questions and all
>> of the responses in a thread because if I can't offer some advice, then
>> maybe I'll learn something. In this case, I feel my time is wasted by both
>> of you because there's nothing I can offer to this purely emotional
>> exchange, >
>
>Uh. I gave good info and am trying to drill it home. Paul doesn't
>like being chided. TFB.

TFB?? That's what you'd like to think, pal. One insult too many. I
don't have to put up with any more of your abuse and I won't.
Bye, Mike. It's getting *very* boring.

<plonk!>
--

"What is now proved was once only imagin'd." - William Blake, 1793.

1081. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 23:05:50 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <t49og052k5mmpbq5b1ov14ct1tcse8rrga@4ax.com>
Source record: 91702
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 20:34:48 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The Smith Chart has served its purpose.
[...]
>My first association with transmission lines was in 1944/5. I have never
>used a Smith chart in the whole of my career.

How did you perform the gut-wrenchingly long-winded calculations in
those glorious days, Reg? Did you get an hour's free use each day of
Colossus? ;-)
--

"What is now proved was once only imagin'd." - William Blake, 1793.

1082. Re: a jinpole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 23:14:08 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410c27c4$1@news.vo.lu>
Source record: 91704

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:GgVOc.21552$iK.15272@newsread2.news.atl.earthlink.net...
> > Here is what happens when your jin-pole breaks at 10m high when you try
to
> > install the last segment of your pylon.
> > http://www.astrosurf.com/lombry/jin-pole-breaking.htm (with comments)
> >
>...
>
> Hard to say from the pix but a good gin pole will have the rope ran up the
> bottom of the pipe and over a pully at the top. If the pole breaks or
bends
> the tower section will still be supported by the rope and will not fall to
> the ground.

There was a pulley on top and bottom too.
The cable came from the winch located 1m above the base of the antenna, went
through a pulley located also at the base of the tower (close to ground
level), went up to the jin pole's pulley and went again down directly to the
ground were someone kept the cable tight.

I added 3 more pictures on the refered page
http://www.astrosurf.com/lombry/jin-pole-breaking.htm

Thierry
>
>
>

1083. Re: Two slim jims in one pvc tube???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 23:14:12 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <8JVOc.204035$JR4.108592@attbi_s54>
Source record: 91703

"Luc" <luco53@hotmail.com> wrote in message
news:410c03a3$0$31050$ee9da40f@news.wanadoo.nl...
>I have planned to build a slim jim antenna for the marine VHF (about 160
>MHz) band and to put it into a weather resistant pvc tube.
> In fact I need another one for 422 MHz band. Both will be used for
> reception purposes only.
>
> My question is: is it posible to combine these two antennas in just one
> tube, so that they don't disturb each other??? The antenna design is
> conform described at
> http://www.ha.cz/a_spionaz/urobsisam/radio/doc/tech.htm#Siting
>
> If not, what is the minimum (horizontal/vertical) distance needed between
> the two slim jim tubes in the mast?
> And also, what is the best method to mount the slim jim tube to the mast?
>
> Thanks in advance!
>
> Luc
>

Well your web page link is about pirate radio operations (R. J. Kojetin
listed as of 2000),
and this antenna design can found on a number of different web page.
http://www.ha.cz/a_spionaz/urobsisam/radio/doc/omni-ant.htm

The "Slim Jim" is an aerial (antenna) designed by G.C. Judd G2BCX and
featured in the "Two-meter Antenna handbook"
This book was published by Newnes Technical Book (ISBN 0 408 00402 9)
http://www.johncath.force9.co.uk/omni%202mtr.htm

http://www.qsl.net/qrp/ant/slimjim.htm

In many ways, this design is a modified "J-pole" antenna design -
which is a very popular and inexpensive antenna to build.
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=3481

http://www.hamuniverse.com/jpole.html

Dual band designs do exist - marine (160 MHz) and UHF
http://www.n7qvc.com/amateur_radio/copper.html

http://www.arrowantennas.com/j-pole.html

w9gb

1084. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 23:29:50 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <F7idnSAY-fL5tpHcRVn-gA@comcast.com>
Source record: 91705
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Bob Dalton" <bdalton@msn.com> wrote in message
news:357b43aa75650c9df76857c0a3c4cac7@news.bubbanews.com...
> I'm thinking about putting a mag mount antenna on my car. But I
> have heard that they really don't work.

They do work. But that all depends on ones definition of "works". The antennas do radiate RF. The really short stubby ones tend to be rather narrow banded meaning the
SWR is near 1 to 1 at the center at channel 19 or 20. Towards channel 1 or 40 the SWR gets progressively worse and can rise to 2 to 1 or 3 to 1. The exact value depends on the model of antenna you buy and how it is installed. If you're lucky the antenna may come with a chart showing the SWR verses frequency. I've seen these on the ones at Radio Shack for example. Basically as long as the SWR remains below 2 to 1 the radio shouldn't have a problem.

The other factor is really short, like the base loaded mag mount, antennas are not very efficient. A lot of your transmitter power is wasted in the loading coil. In your case if all you want is short range communications, a few miles, then this may not even affect you much.

> Someone said that because of
> the magnet their isn't any capacitive coupling for the RF ground. Is
> that true?

There is capacitive coupling for the RF ground, so don't worry about it.

> So a mag mount would work just as well if I set it on my
> picnic table?

It might IF the table is metal, and depending on size too. Wood ones don't, so don't waste your time trying it.

> Also, does the coax attached to it as a ground?

In a perfect world the answer is the coax braid "should" be at ground potenial for RF. The coax itself is not a ground connection. To explaine this would take several paragraphs to get in to the details.

> If I change the length of the coax, will a mag mount quit working?

No. But your SWR meter may show changes, and if the radio has a built-in SWR monitoring circuit it could cause the radio to fold back power output or shut down. What is happening if you see this is the coax has RF current on it on the outside surface and ends up acting like part of the radating section of the antenna.

--
Leland C. Scott
KC8LDO

Wireless Network
Mobile computing
on the go brought
to you by Micro$oft

1085. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 23:39:48 UTC
From: jgboyles@aol.com
Message-ID: <20040731193948.22153.00000851@mb-m07.aol.com>
Source record: 91706

>d is the diameter of the wire, period. The formula is for a line with no
>insulation.

Hi Roy, I am sure you are correct, I was in a hurry when I posted. I was looking at fig. 20 (b) on page 24-16 in the Antenna Book. It looks like insulated wire in that figure, very confusing as I look at it now. That was what is was going on, the formula below that figure. Upon reading the text, I see the formula is for d of uninsulated wire. Sorry, and thanks for correcting me.
73 Gary N4AST

1086. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-07-31 23:55:41 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410c3180$1@news.vo.lu>
Source record: 91707

Hi,

About the rope or the steel cable running through the gin-pole and pulleys, to confirm or change our installation if necessary, I am looking for any URL or free-hand drawings (scanned) showing the all circuit of the rope and how the fix the pulleys on both the segment to lift and on the tower top, even when the segment in higher than the tower.

NB. We have not installed an additional tower to lift the segments. We use the main tower to lift them, taking advantage of an electrical winch to lift the gin-pole fixed on a mobile basket (cage or lift) on which will be attached the mast and the beam. This cage goes up and down, avoiding to climb on the tower to maintain and check the antenna.

Up to now our installation was able to lift 3 segments up to 8m high, so it seems to work (almost) correctly. But a confirmation is always welcome to secure our system.

If you want to send me closeup images or drawing, do contact me either by this forum or via http://www.astrosurf.com/lombry/post.htm to get my private email.

Thanks in advance

The last segment 'd be erected near 5-8 august.

73
Thierry

1087. Capacitor loaded vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 00:05:17 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cehc3u$do8$1@news6.svr.pol.co.uk>
Source record: 91708

At present I am designing a 40m centre loaded vertical from an old fibreglass cb antenna about 18' long. I plan to use a single counterpoise of the same dimensions and loaded at the same point and sloping down from the antenna, a loaded vertical dipole if you like. Nothing new here I hear you say but I am planning to add two motor driven variable capacitors to the feedpoint, one in the vertical and one in the counterpoise to resonate the antenna on the bands between 40 and 10m. I can't find anything in my books or on the net relating to shrotening antennas using capacitors. I have used this technique before sucessfully in a vertical for 20-10m with tuned radials for QRP.

I wonder if anyone would like to have a think about it and maybe suggest a good starting point as to capacitor value for use with 100W. I have tried and failed to use antenna modelling software before so this is not an option for me.

Thanks in advance.

Jon G2FHF

1088. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 00:43:24 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cehebg$do8$2@news6.svr.pol.co.uk>
Source record: 91709

Matt

Take a look at Reg G4FGQ's site here http://www.btinternet.com/~g4fgq.regp/index.html#S102 He has loads of simple software for free use on there, one of which is called coaxtrap. Download the software and use it to work out the dimensions of a coaxial cable trap for 50MHz. I did a test using the dimensions of a fibreglass cb whip that I have here and came up with 7.6 turns on a 10mm former. 10mm is the diameter of my whip here. Take a look in the ARRL antenna book to see how to make coaxial traps. You may also find this site useful http://www.cqham.ru/coaxtrap.htm. I don't think that you will have enough room at the top of the antenna for 10m as the tral will take up a large chunk of that so it might be worth either coiling the 6m antenna wire around the whip to bring the end of the antenna down the whip or adding a capacity hat to the top of the whip. The latter might not be feasable if you are using the antenna mobile. You might also fing the software "vertload" and "helical3" on Reg's website of use.

If you have any problems of need the above explaining please email me. If you send me your cb whip dimensions I would be happy to do the math for you.

Jon G2FHF

1089. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 00:50:31 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <uvbog0poc1ireh2pn3326go70jiaa6hnsq@4ax.com>
Source record: 91710
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Sat, 31 Jul 2004 15:37:24 GMT, Bob Dalton <bdalton@msn.com> wrote
in <357b43aa75650c9df76857c0a3c4cac7@news.bubbanews.com>:

> I'm thinking about putting a mag mount antenna on my car. But I
>have heard that they really don't work. Someone said that because of
>the magnet their isn't any capacitive coupling for the RF ground. Is
>that true? So a mag mount would work just as well if I set it on my
>picnic table? Also, does the coax attached to it as a ground? If I
>change the length of the coax, will a mag mount quit working?
>
>Thanks.

Sure they work, but don't expect performance to be on par with the
same antenna on a permanent mount. And it probably won't work very
well from the picnic table for various reasons. But if you do use a
mag-mount, use the same length of coax that came with the mount, or
whatever length is recommended by the manufacturer.

As for those who think a mag-mount works because of capacitive
coupling to the mounting surface, I would suggest you actually try to
measure this capacitance -- you will find that it's not nearly enough
to make an effective counterpoise connection unless your frequencies
are considerably higher than 27 MHz.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1090. Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:00:06 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <qgXOc.501$em6.68@newssvr22.news.prodigy.com>
Source record: 91711

am looking for a good part 15 to broadcast music which one would you guys suggest. I am looking for decent sound and good range from a part 15 setup. I also need info on the transmitter and the antenna I be willing to build some stuff but buying the stuff would be better.

1091. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:25:28 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <410c48b8_1@news1.prserv.net>
Source record: 91712

Thierry:

Before you get someone killed, hire some competent high iron workers.
Anyone who drops a section of tower because they are uninformed on tower
safety is going to raise the insurance rates for everyone, never mind the
human life you may take.

--
Crazy George
Remove N O and S P A M imbedded in return address

1092. Re: Capacitor loaded vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:27:40 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <410c492a_4@news1.prserv.net>
Source record: 91713

Well, one of my Elmers had a set-up like that in 1951, except the elements were horizontal. Worked well.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Jon" <jon@portlandbill.co.uk> wrote in message
news:cehc3u$do8$1@news6.svr.pol.co.uk...
> At present I am designing a 40m centre loaded vertical from an old
> fibreglass cb antenna about 18' long. I plan to use a single counterpoise
of
> the same dimensions and loaded at the same point and sloping down from the
> antenna, a loaded vertical dipole if you like. Nothing new here I hear you
> say but I am planning to add two motor driven variable capacitors to the
> feedpoint, one in the vertical and one in the counterpoise to resonate the
> antenna on the bands between 40 and 10m. I can't find anything in my books
> or on the net relating to shrotening antennas using capacitors. I have
used
> this technique before sucessfully in a vertical for 20-10m with tuned
> radials for QRP.
>
> I wonder if anyone would like to have a think about it and maybe suggest a
> good starting point as to capacitor value for use with 100W. I have tried
> and failed to use antenna modelling software before so this is not an
option
> for me.
>
> Thanks in advance.
>
> Jon G2FHF
>
>

1093. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:32:31 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <bJXOc.2444$Jo1.1624@lakeread01>
Source record: 91714

"DJboutit" <Recordking@Hotmail.com> wrote in message
news:qgXOc.501$em6.68@newssvr22.news.prodigy.com...
> am looking for a good part 15 to broadcast music which one would you guys
> suggest. I am looking for decent sound and good range from a part 15
setup.
> I also need info on the transmitter and the antenna I be willing to build
> some stuff but buying the stuff would be better.
>
>

The SStran transmitter is a damn good unit,
and will give you up to a mile range
if you're up to building the antenna suggested at their website.

www.sstran.com

The SStran is the most bang for the buck,but if you
want to go cheap, the Vectronics kit is less money, but isn't in the same
league as the SStran unit. There are commercial part 15 transmitters and
antenna systems on the market, but expect to pay upwards of 800 to 1000
dollars for one.

Pete k1zjh

1094. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:32:34 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <4phog0pa9c9nbtpeni1q2kv42pr50blb1r@4ax.com>
Source record: 91715
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 23:48:04 +0100, Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote:

>On Sat, 31 Jul 2004 19:24:52 +0100, John Woodgate
><jmw@jmwa.demon.contraspam.yuk> wrote:
>
>>I read in sci.electronics.design that Paul Burridge
>><pb@notthisbit.osiris1.co.uk> wrote (in <n2nng0hvjmgl5ljj1li87onra4sgt0p
>>d97@4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on
>>Sat, 31 Jul 2004:
>>>And as John W said, how do you tell whether the point referred to on the
>>>Chart is actually a Y-parameter at all??
>>
>>No, I didn't say that. Please refrain from citing me in support of your
>>inanities.
>
>Sorry John. I didn't mean to imply I was investing any faith in your
>all-too-frequently incorrect assertions.
>HTH.

*** PLEASE NOTE ***

I am seeing Burridge's crap today only because I'm using my laptop for
news reading, with no plonk filters, since my main "communications"
machine took a dipsy-doodle and I have it lashed up in backup mode
right now.

Without a doubt Burridge is so obscene as to rank him right up there
with the infamous Robert... except that Robert knew his technology.

Poor Burridge never will.

1095. Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:40:36 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040731214036.252$vP_-_@newsreader.com>
Source record: 91716
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Leland C. Scott" <kc8ldo@arrl.net> wrote:

-snip good points-

Hi Lee, are you going to the Woodward dream cruise this year? I am
as long as we don't have another east coast power failure. ;)

I'm not bringing the Plymouth cuz it's shot down for now.

1096. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:43:21 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <3giog097k35lt81sqvda45el0n1lgkpp3q@4ax.com>
Source record: 91717
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 18:32:34 -0700, Jim Thompson
<thegreatone@example.com> wrote:

Hey Jim, as long as we're OT, try to find some

Francis Coppola (the Godfather guy)
Diamond Series
Gold Label
Chardonnay
2002

It's from Monterey, really butterey, a little spicy, 13.5% but it
doesn't taste hot.

Give it a shot if you can find it. It's at Safeway here.

John

1097. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:46:39 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <jJednec7ptbk1pHcRVn-hg@comcast.com>
Source record: 91718
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Bob Dalton" <bdalton@msn.com> wrote in message
news:357b43aa75650c9df76857c0a3c4cac7@news.bubbanews.com...
> I'm thinking about putting a mag mount antenna on my car. But I
> have heard that they really don't work. Someone said that because of
> the magnet their isn't any capacitive coupling for the RF ground. Is
> that true? So a mag mount would work just as well if I set it on my
> picnic table? Also, does the coax attached to it as a ground? If I
> change the length of the coax, will a mag mount quit working?
>
> Thanks.

Bob,
Unless you are using a 1/4 wave VHF antenna, make sure it has a strong
magnet, or magnets. I had a 5/8 wave 2m antenna on a name brand mag mount
blow off the roof.

Tam/WB2TT

1098. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 01:57:42 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <lejog01q7iibp2sennqiivdrkahs12mar0@4ax.com>
Source record: 91719
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 18:43:21 -0700, John Larkin
<jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:

>On Sat, 31 Jul 2004 18:32:34 -0700, Jim Thompson
><thegreatone@example.com> wrote:
>
>
>
>Hey Jim, as long as we're OT, try to find some
>
>Francis Coppola (the Godfather guy)
>Diamond Series
>Gold Label
>Chardonnay
>2002
>
>
>It's from Monterey, really butterey, a little spicy, 13.5% but it
>doesn't taste hot.
>
>Give it a shot if you can find it. It's at Safeway here.
>
>
>John
>

Already tried it... pretty good, though perhaps, as you say, "a little
spicy".

1099. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 02:06:19 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040731220619.420$Na@newsreader.com>
Source record: 91720
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:
> "Bob Dalton" <bdalton@msn.com> wrote in message
> news:357b43aa75650c9df76857c0a3c4cac7@news.bubbanews.com...
> > I'm thinking about putting a mag mount antenna on my car. But I
> > have heard that they really don't work. Someone said that because of
> > the magnet their isn't any capacitive coupling for the RF ground. Is
> > that true? So a mag mount would work just as well if I set it on my
> > picnic table? Also, does the coax attached to it as a ground? If I
> > change the length of the coax, will a mag mount quit working?
> >
> > Thanks.
>
> Bob,
> Unless you are using a 1/4 wave VHF antenna, make sure it has a strong
> magnet, or magnets. I had a 5/8 wave 2m antenna on a name brand mag mount
> blow off the roof.
>
> Tam/WB2TT
>
Wilson mag mounts donut blow off.

1100. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 02:12:43 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cehjir$n28$1@titan.btinternet.com>
Source record: 91621
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

```
>
> Or used a VNA?
>
==============================

Wot's a VNA ?

I have to agree there are certain aspects, a few octaves of my education,
which have been neglected. The time factor has intervened. But we should
leave personalities out of it.
----
Reg.
```

1101. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 02:19:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cehjumnbn1@titan.btinternet.com>
Source record: 91622
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

```
> Could you please explain that a bit more? The chart is a graphical way
> of doing mathematics. Where does frequency enter the picture?
>
> If you mean that the characteristic impedances of 'transmission lines'
> at low frequencies aren't resistive, I quite agree.
> --
================================

The characteristic impedances of ALL practical lines aren't resistive. But
your statement just about sums up the situation.
----
Reg.
```

1102. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 02:24:00 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <5vYOc.20119$fm2.8359@lakeread02>
Source record: 91623

"Crazy George" wrote

> Before you get someone killed, hire some competent high iron workers.
> Anyone who drops a section of tower because they are uninformed on tower
> safety is going to raise the insurance rates for everyone, never mind the
> human life you may take.

Hey George, you know...
the purpose of some people's lives is to serve as a warning to others...

Jack
Virginia Beach VA
fmr Journeyman Ironworker
local 348 Erie PA

1103. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 02:42:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410c59ce_1@corp.newsgroups.com>
Source record: 91624
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Reg Edwards wrote:
> The Smith Chart, as sentimental and as nostalgic as it may be, is redundant.

All graphs are redundant and can be replaced by equations or tables.
However, a picture (graph) is still worth a thousand words (or numbers).
A glance at a graph tells me more than an hour of studying endless rows
and columns of numbers.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1104. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 02:50:34 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cehlpq$gl9$1@hercules.btinternet.com>
Source record: 91625
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

> >>It applied ONLY to the HF spectrum, serious calculating errors occurr if
> >>applied to the LF spectrum and below although few engineers realised
> >>this. And still don't.
> >
> >Could you please explain that a bit more? The chart is a graphical way
> >of doing mathematics. Where does frequency enter the picture?
>
> Perhaps Reg can also tell us in which year since the Chart's inception
> the mathematical relationship between a graphical solution to a
> computation and a numerical one broke down?
> --
==========

It has never broken down. It's the engineers' educational system which has broken down. Mathematics gradually became a neglected subject. And that began around 1945. Students and professors were war casualties. Present products of the system are mentally handicapped. They are reduced to using look-up tables and manufacturers' digital-chip catalogues with little understanding of what's really going on in the world.

It suffices after a fashion but is very poor engineering economics and a squandering of the Earth's limited resources.

Which is a long way from S-Parameters.

Reg.

1105. Modling a coil

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 03:05:52 UTC
From: rlangevin@interwrx.com
Message-ID: <410C5E10.7090803@interwrx.com>
Source record: 91626

I ended up with a antenna, from a trade, that is a fiberglass stick
tuned around 165 mhz.
I found the instructions on the repeterbuilders web site for retuning
a station master antenna. I tried there procedure and could not get it
to work.
I removed the two screws from the base of the antenna and pulled the
element out of the tube what I found was 5 coils with spacers and a j
pole type of base. I want to model this thing using eznec demo but I
don't know how to input the coils.

The end result I'm trying for is an antenna on 2 /440.

Thanks
Rich L
KB7YEB

1106. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 03:07:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cehmqdhfk1@hercules.btinternet.com>
Source record: 91627
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

> What's the cutoff frequency below which a Smith Chart won't work?
>
> John
>
==========

This question shows a limited understanding of the LF, and below, frequency spectrum. There are an infinite number of octaves.

What is the cut-off frequency of a simple R+C high-pass filter?

It is first necessary to specify how many decibels the response must have fallen.

Reg.

1107. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 03:18:09 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <75oog05ek82akc16tj1cgge3nj04e7sggs@4ax.com>
Source record: 91628
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 1 Aug 2004 03:07:57 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>> What's the cutoff frequency below which a Smith Chart won't work?
>>
>> John
>>
>==============================
>
>This question shows a limited understanding of the LF, and below, frequency
>spectrum. There are an infinite number of octaves.
>
>What is the cut-off frequency of a simple R+C high-pass filter?
>
>It is first necessary to specify how many decibels the response must have
>fallen.
>----
>Reg.
>

C'mon Reg, answer the question. What is there about a Smith chart that
makes it incorrect at low frequencies?

John

1108. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 03:36:33 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <5zZOc.2925$QA5.1685@nwrddc01.gnilink.net>
Source record: 91629
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Reg

I think you are wrong about Smith Charts being limited to use at low
frequencies. Maybe you can take time to tell me where my thinking has gone
wrong. I'm not really a good engineer. I avoided the mathematical aspects
of design whenever possible.
I considered the Smith Chart a plot of *all* impedances with + R values.
That means that there is a point on the Chart that represents every
impedance independent of the frequency associated with that impedance
determination.

I have maybe been in error when I state that I can look at an impedance
plotted on the Smith Chart and identify which combination of the minimum
number of reactors will be best for matching that impedance to the
impedance of your choice, at any frequency. I realize that there are
conditions where my method gets difficult, but, I contend that a Smith Chart
is a nifty tool for those of us who arent smart enough to do the math.

Jerry

.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cegvp8gpk1@hercules.btinternet.com...
> The Smith Chart has served its purpose.
>
> It was a much-simplified version of earlier, more complicated charts,
dating
> back to the Victorian age used to solve electrical engineering problems
> involving complex hyperbolic functions.
>
> It applied ONLY to the HF spectrum, serious calculating errors occurr if
> applied to the LF spectrum and below although few engineers realised this.
> And still don't.
>
> But it became popular with design engineers immediately following its
> introduction in the late 1930's when HF broadcasting, TV and Radar, and
> relatively short, low-loss HF transmission lines became the vogue.
>
> The design and use of HF and VHF lines was much further accelerated during
> WW2 when all the principal participating nations indulged in
vitally-urgent,
> secret work associated with VHF communications and Radar. The Smith Chart
> became available just at the right time. It could almost be considered as
a

> war weapon used by all sides.
>
> But it became reduntant just as rapidly on the invention of the scientific
> pocket calculator. In particular calculators which had hyperbolic
functions.
> The pocket calculator could now, much more easily, with equal facility,
> undertake transmission line calculations involving the whole of the
> frequency spectrum from DC upwards.
>
> It is said that, these days, the Smith Chart has eductional value. It
allows
> problems to be visualised. Indeed it does. But there are other just as
good
> educational methods which involve mathematical procedures.
>
> My first association with transmission lines was in 1944/5. I have never
> used a Smith chart in the whole of my career. Neither have I ever met
anyone
> who has. Perhaps I haven't met many people.
>
> The Smith Chart, as sentimental and as nostalgic as it may be, is
redundant.
> ----
> Reg.
>
>

1109. Re: Earthing systems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 03:49:12 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ZKZOc.9872$g_5.7485@bignews4.bellsouth.net>
Source record: 91630
Cross-posted to: alt.energy.high-voltage,rec.radio.amateur.antenna,rec.boats.cruising

Time delays seems to infer the involvement of some capacitance into the mix
between 2 points of earth ground.

the time delays infer a breakdown in insulation when the voltage builds
sufficiently up to the insulation breakdown point.

So find the breakdown voltage of the insulation and the capacitance and the
applied voltage and the resistance, and you may be able to predict a time
delay.

- I may be wrong - but that's my 2-cents
Hal

<mmufoe2004@yahoo.com> wrote in message
news:b770165c.0407290047.7e6e102d@posting.google.com...
> I am Ram , Ph.D. Student
>
>
> Dear sir/madam,
>
> I am trying to find out the correlation between the time delays in
> conduction mechanism and the degree of earth resistance.
>
> I am using PSPICE simulation package for the simulation work , any
> suggestions to give help welcome
>
>
>
> Research Title:
>
> INVESTIGATION OF THE TRANSIENT BEHAVIOUR OF EARTHING SYSTEMS SUBJECTED TO
> HIGH IMPULSE CURRENTS
>
>
> One of the research objectives is to observe the correlation between the
> time delays in conduction mechanism and the degree of earth resistance for
> different soil resistivity, impulse polarity and earth electrode
> configuration
>
>
>
> Time delays can be defined as the time taken to reach the current peak.
> Generally, the time delay can also be influenced by non-uniform water
> settling process, drying and heating in soil and of course due to the

> statistical nature of air breakdown. However, these influences are
> neglected in determining the correlation between the time delays and earth
> resistance reduction.
> In the previous studies, the time delays in soil due to ionisation and
> heating have been plotted against current/voltage magnitudes. It was found
> that the time delays were decreasing with higher currents/voltages.
> However, the tune delays were also taught to be due to a statistical
> nature of air breakdown.
>
> If you have any question welcome
>
> I am looking forward to hear from you soon
>
> Thanks in advance
>
> Ram

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1110. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 04:18:00 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <zw9jta7oadui.dlg@news.individual.net>
Source record: 91632
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 1 Aug 2004 02:50:34 +0000 (UTC), Reg Edwards wrote:

>>>>It applied ONLY to the HF spectrum, serious calculating errors occurr if
>>>>applied to the LF spectrum and below although few engineers realised
>>>>this. And still don't.
>>>
>>>Could you please explain that a bit more? The chart is a graphical way
>>>of doing mathematics. Where does frequency enter the picture?
>>
>> Perhaps Reg can also tell us in which year since the Chart's inception
>> the mathematical relationship between a graphical solution to a
>> computation and a numerical one broke down?
>> --
> ==
>
> It has never broken down. It's the engineers' educational system which has
> broken down. Mathematics gradually became a neglected subject. And that
> began around 1945. Students and professors were war casualties. Present
> products of the system are mentally handicapped. They are reduced to using
> look-up tables and manufacturers' digital-chip catalogues with little
> understanding of what's really going on in the world.
>
> It suffices after a fashion but is very poor engineering economics and a
> squandering of the Earth's limited resources.
>
> Which is a long way from S-Parameters.
> ----
> Reg.

Damn Reg. So far, I'm really liking what you're writing, history
included. As much as I like shortcuts, they never satisfy my desire
to truly understand an engineering concept which can only be related
(IME and to my satisfaction, etc) via mathematical analysis. If you
tell me that a range of resistor values will light up an LED
supplied with a certain range of voltage, I'm not going to sleep
easily until I know why. Yeah, there are some neat analogies, but
that doesn't yield an ohmic value. Math will.

That's why I'm ranting. Running to Wendy's might be a quick fix, but
it isn't my way and neither is randomly shoving values into Spice as
great of a tool as it is. It's just a tool and it's no better than
the operator.

I should stop now because PB already told me to keep my views to myself if they don't answer the question. I should be plonked post haste.

--
Best Regards,
Mike

1111. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 04:19:12 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1kpirajws18ml$.dlg@news.individual.net>
Source record: 91631
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 1 Aug 2004 02:19:02 +0000 (UTC), Reg Edwards wrote:

>> Could you please explain that a bit more? The chart is a graphical way
>> of doing mathematics. Where does frequency enter the picture?

Reaactance depends on it. I must not understand your question.
>>
>> If you mean that the characteristic impedances of 'transmission lines'
>> at low frequencies aren't resistive, I quite agree.
>> --
> ================================
>
> The characteristic impedances of ALL practical lines aren't resistive. But
> your statement just about sums up the situation.
> ----
> Reg.

--
Best Regards,
Mike

1112. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 04:39:06 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <109ww9af898hb.dlg@news.individual.net>
Source record: 91633
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 03:36:33 GMT, Jerry Martes wrote:

> Reg
>
> I think you are wrong about Smith Charts being limited to use at low
> frequencies. Maybe you can take time to tell me where my thinking has gone
> wrong. I'm not really a good engineer. I avoided the mathematical aspects
> of design whenever possible.
> I considered the Smith Chart a plot of *all* impedances with + R values.
> That means that there is a point on the Chart that represents every
> impedance independent of the frequency associated with that impedance
> determination.
>
> I have maybe been in error when I state that I can look at an impedance
> plotted on the Smith Chart and identify which combination of the minimum
> number of reactors will be best for matching that impedance to the
> impedance of your choice, at any frequency. I realize that there are
> conditions where my method gets difficult, but, I contend that a Smith Chart
> is a nifty tool for those of us who arent smart enough to do the math.
>
> Jerry
>
There are other considerations in detemining how to arrange the
matching net. Once you have the topology, the chart is pretty
convenient, IMO. And it doesn't save you from any *complicated*
math. Obviously, going from j5 to j0 is simple arithemtic - you need
-j5 reactance or suseptance depending on whether your selected
topology calls for a series or shunt.

The nice thing IMO is that you can keep track of each step on a
graph of the transformation and not have to look at a blur of
calculations.

IMO, it avoids no arithmetic at all. You still have to add and
subtract. And with or without it, you have to convert the reactances
to puFFs and Henries for that freq.

--
Best Regards,
Mike

1113. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 04:44:30 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <FOCdnemcHvW-6JHc4p2dnA@comcast.com>
Source record: 91634
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Steveo" <moparholic@hotmail-nospam.com> wrote in message
news:20040731214036.252$vP_-_@newsreader.com...
> "Leland C. Scott" <kc8ldo@arrl.net> wrote:
>
> -snip good points-
>
> Hi Lee, are you going to the Woodward dream cruise this year? I am
> as long as we don't have another east coast power failure. ;)

Why? You want to know when I won't be home so you can slip over here and stick another note under my door like a chicken. Oh by the way is that construction on 18 done, and is the hillbilly that owns the ramshackle lawn mower business east of I-71 sign still up? I keep waiting for his sign to fall over in to the mud pit next to it. The flag in the window is tacky.

--
Leland C. Scott
KC8LDO

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1114. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 04:47:09 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <zj3tr18z1hz6$.dlg@news.individual.net>
Source record: 91635
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 18:32:34 -0700, Jim Thompson wrote:

> On Sat, 31 Jul 2004 23:48:04 +0100, Paul Burridge
> <pb@notthisbit.osiris1.co.uk> wrote:
>
>>On Sat, 31 Jul 2004 19:24:52 +0100, John Woodgate
>><jmw@jmwa.demon.contraspam.yuk> wrote:
>>
>>>I read in sci.electronics.design that Paul Burridge
>>><pb@notthisbit.osiris1.co.uk> wrote (in <n2nng0hvjmgl5ljj1li87onra4sgt0p
>>>d97@4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on
>>>Sat, 31 Jul 2004:
>>>>And as John W said, how do you tell whether the point referred to on the
>>>>Chart is actually a Y-parameter at all??
>>>
>>>No, I didn't say that. Please refrain from citing me in support of your
>>>inanities.
>>
>>Sorry John. I didn't mean to imply I was investing any faith in your
>>all-too-frequently incorrect assertions.
>>HTH.
>
> *** PLEASE NOTE ***
>
> I am seeing Burridge's crap today only because I'm using my laptop for
> news reading, with no plonk filters, since my main "communications"
> machine took a dipsy-doodle and I have it lashed up in backup mode
> right now.
>
> Without a doubt Burridge is so obscene as to rank him right up there
> with the infamous Robert... except that Robert knew his technology.
>
> Poor Burridge never will.

Do you have any idea how happy I am now that he plonked me :)^21
blackjack! It tells me that I made an honest effort to push him in
the right direction and had no more success than those before me. I
know *one* horse that will doe of thirst. Or is he an ass?
--
Best Regards,
Mike

1115. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:14:19 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040801011419.320$9q@newsreader.com>
Source record: 91636
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.dogie.is.an.idiot

"Leland C. Scott" <kc8ldo@arrl.net> wrote:
> "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> news:20040731214036.252$vP_-_@newsreader.com...
> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> >
> > -snip good points-
> >
> > Hi Lee, are you going to the Woodward dream cruise this year? I am
> > as long as we don't have another east coast power failure. ;)
>
> Why? You want to know when I won't be home so you can slip over here and
> stick another note under my door like a chicken. Oh by the way is that
> construction on 18 done, and is the hillbilly that owns the ramshackle
> lawn mower business east of I-71 sign still up? I keep waiting for his
> sign to fall over in to the mud pit next to it. The flag in the window is
> tacky.
>
LOL..you fuckin' jackass. Is his name Mr Peebles too? Only reason
I ask is the last Mr Peebles slapped you and your boyfriend dogie
like a red headed step-child.

I want to meet you, that's why I'm asking.

--
Bearded clams are the reason I like to eat out so much.

1116. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:16:58 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <e1%Oc.3027$QA5.125@nwrddc01.gnilink.net>
Source record: 91637
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

ike

I have convinced myself that the Smith Chart alows it to be determned if
it is preferable to add series (+ or - X), or Shunt (+ or - X) depending
where the complex Z plots on the Chart.
I really admire the guys who can match impedances with math only. I just
dont have good study habits, so I'm not smart.

"Activ8" <reply2group@ndbbm.net> wrote in message
news:109ww9af898hb.dlg@news.individual.net...
> On Sun, 01 Aug 2004 03:36:33 GMT, Jerry Martes wrote:
>
> > Reg
> >
> > I think you are wrong about Smith Charts being limited to use at low
> > frequencies. Maybe you can take time to tell me where my thinking has
gone
> > wrong. I'm not really a good engineer. I avoided the mathematical
aspects
> > of design whenever possible.
> > I considered the Smith Chart a plot of *all* impedances with + R
values.
> > That means that there is a point on the Chart that represents every
> > impedance independent of the frequency associated with that impedance
> > determination.
> >
> > I have maybe been in error when I state that I can look at an
impedance
> > plotted on the Smith Chart and identify which combination of the minimum
> > number of reactors will be best for matching that impedance to the
> > impedance of your choice, at any frequency. I realize that there are
> > conditions where my method gets difficult, but, I contend that a Smith
Chart
> > is a nifty tool for those of us who arent smart enough to do the math.
> >
> > Jerry
> >
> There are other considerations in detemining how to arrange the
> matching net. Once you have the topology, the chart is pretty
> convenient, IMO. And it doesn't save you from any *complicated*
> math. Obviously, going from j5 to j0 is simple arithemtic - you need
> -j5 reactance or suseptance depending on whether your selected
> topology calls for a series or shunt.
>

> The nice thing IMO is that you can keep track of each step on a
> graph of the transformation and not have to look at a blur of
> calculations.
>
> IMO, it avoids no arithmetic at all. You still have to add and
> subtract. And with or without it, you have to convert the reactances
> to puFFs and Henries for that freq.
>
> --
> Best Regards,
> Mike

M ike

I have convinced myself that the Smith Chart alows it to be determned if it is preferable to add series (+ or - X), or Shunt (+ or - X) depending where the complex Z plots on the Chart.
I really admire the guys who can match impedances with math only. I just dont have good study habits, so I'm not smart.

Jerry

1117. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:19:53 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <ug5hnbb6nt08$.dlg@news.individual.net>
Source record: 91638
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 19:28:48 +0100, John Woodgate wrote:

> I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
> wrote (in <1hv1lz9ljgo3f$.dlg@news.individual.net>) about 'S - Y
> Parameter conversion with Smith Chart', on Sat, 31 Jul 2004:
>>On Sat, 31 Jul 2004 18:07:49 +0100, John Woodgate wrote:
>>
>>> I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
>>> wrote (in <uo5xsdawvz9f.dlg@news.individual.net>) about 'S - Y Parameter
>>> conversion with Smith Chart', on Sat, 31 Jul 2004:
>>>
>>>>I can see it's not an s-param
>>>
>>> I was asking HOW you can see that. Do you have selective spectacles,
>>> tuned to s-parameter expressions?
>>
>>Just because s-params are in mag <ang format and not in a + jb . At
>>least I've never seen tham that way.
>
> I asked purely for information. It might have been that there are limits
> on the values that the various parameters can take, and that example was
> outside the limits for an s-parameter.
>
>>Furthermore, I know exactly what PB
>>is referring to, in case you didn't notice the page number refs.
>
> I noticed that, but I, and doubtless many others, don't have the book.

Ok. I think I understand your confusion, now, and I hope I didn't
call it a Y param (part of the OP subject) and just said it's not an
s-param, which as I said, isn't expressed as a complex number, IME.

The example is given as a load of Z = 100 + j75 which normalized to
50 Ohms is 2 + j1.5 and as I've tirelessly tried to drive home can
clearly be read off the chart as 0.54 <29.7 deg

Due to the geometry of the SC, a normal polar/rect (v.v.) conversion
doesn't work and as I mentioned earlier, those conversion formulas
look very much like something that came from the circle equation. If
you have a conversion chart handy, look at the (1-y), (1+y) factors
and consider the fact that the origin is at 1,1. It's obvious to me
that the formulas were derived analytically from

(x-h)^2 + (y-k)^2 = r^2

with h, k = (1,1), i.e., the center of the s-param circle is at the intersection of the unit R and X circles.

Interesting that the +/- signs in the conversion are kin to the hyperbola (no?), which IIRC Reg mentioned (xmission line eqs), but I'll wager it all came from the SC's circular geometry, mainly because I coded an SC chart and went as far as calculating the intersection points where the arc change line width and eventually terminate like a real printed SC, not the typical CAD couple of lines that go to oo . You could say that I have deep carnal knowledge of the chart's construction. My app displays the Z, Y, S params of the cursor position in the status bar and damned if I remember whether I naively (or brainfartedly) used polar/rect conversions for that.

--
Best Regards,
Mike

1118. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:23:40 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <ybOdnYWVusnM45HcRVn-qQ@comcast.com>
Source record: 91639
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
news:uvbog0poc1ireh2pn3326go70jiaa6hnsq@4ax.com...
> As for those who think a mag-mount works because of capacitive
> coupling to the mounting surface, I would suggest you actually try to
> measure this capacitance -- you will find that it's not nearly enough
> to make an effective counterpoise connection unless your frequencies
> are considerably higher than 27 MHz.

Not really. Consider a magnetic base of 2 inches in diameter sitting on a
painted metal
surface with 0.010 inches of paint. Then as an approximation I looked up
the dielectric constant for epoxy, 3.62, to use for the paint.

Cpf = 0.225 * Er * A / T

Where Cpf is the capacitance in pf
Er is the dielectric constant
A is area of one plate of the capacitor
T is the distance between the two plates

All dimension in inches.

The above example works out to C = 255.88pf

The reactance of 256pf at 27MHz is 23.03 ohms. If the paint dielectric is
higher, paint thinner, or the antenna base larger in diameter, then the
reactance would be even lower. Remember this is reactive, not resistance. By
adjusting the antenna a bit you can compensate for this.

--
Leland C. Scott
KC8LDO

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1119. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:24:29 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <MPG.1b761e651f37ba4f9896f2@news-central.giganews.com>
Source record: 91641
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

In article <cehjir$n28$1@titan.btinternet.com>,
g4fgq.regp@ZZZbtinternet.com says...
> >
> > Or used a VNA?
> >
> ==========
>
> Wot's a VNA ?

Vector network analyzer. Since the mid-1970s, maybe earlier, they've
been able to generate both scalar and polar plots of S-parameters
directly. Very handy for antenna work, if you don't mind dragging 75
pounds of gear around! I just wrote some code to grab Smith-chart plots
off a friend's Advantest R3762AH, and I'm going through some real
hardware envy right now.

> I have to agree there are certain aspects, a few octaves of my education,
> which have been neglected. The time factor has intervened. But we should
> leave personalities out of it.

True; this thread has been generating more heat than light since it
began. I've stayed out of it since I'm not a certified guru at this
stuff. I don't want to post any incorrect or incomplete information
that will further confuse our esteemed interlocutor. It'd probably be a
good idea for all others who aren't fully up to date on the principles
to do the same. :)

Conversely, I've already hit 'print' twice on J. Woodgate's posts to
keep them around for posterity....

-- jm

---
http://www.qsl.net/ke5fx
Note: My E-mail address has been altered to avoid spam

1120. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:24:56 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <ZeGdnSRl5JUA45HcRVn-hQ@comcast.com>
Source record: 91640
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:jJednec7ptbk1pHcRVn-hg@comcast.com...
> Unless you are using a 1/4 wave VHF antenna, make sure it has a strong
> magnet, or magnets. I had a 5/8 wave 2m antenna on a name brand mag mount
> blow off the roof.

MFJ?

--
Leland C. Scott
KC8LDO

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1121. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:25:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cehurp$o26$1@hercules.btinternet.com>
Source record: 91642

Hi Walt,

Believe me, I DO understand and sympathise with your genuine feelings about the sentiment and nostalgia associated with the Smith Chart with which I have no criticism. It was a highly valuable, fast, sufficiently accurate and much-esteemed tool when nothing else was available except tedious tables and the slide rule.

The reason I never found a use for Mr Smith's chart was an obvious one - I was involved with research in the spectrum from 1/20th of a cycle per second up to several MHz at which frequencies the chart, of which I was not unaware, was useless. Line lengths extended up to 3000 miles and, yes, there were standing waves albeit rather damped.

So my education on transmission lines was self-taught and thorough. It is not surprising I arrived at a different set of viewpoints on line behaviour from that acquired by the majority of engineers, at that time, who had worked their simplified way downwards from the newly invented magnetron at 3 GHz. (Indeed it is from where I initially began myself.)

My present criticism is not so much of SWR meters as of the people who imagine they are using them. The only people I meet are on newsgroups such as this who are a mixture of professionals and amateurs, very often both. It's very difficult to distinguish one from the other. As you may have noticed I have classified many of them, without being specific, yet kindly and humorously I hope, as being old wives who tell tales.

They tell tales, not only because they plagiarise each other, but because they have mis-educated themselves, without ever thinking about it, by taking the name "SWR Meter" literally. Whereas the so-called meter itself does nothing of the kind. There is not even a line which exists on which the SWR is measured. Consequently what is really going on is misunderstood. Virtual short and open circuits, reflected power, etc., in the way of explanations are just so much nonsense. Conjugate matches in practice do not exist. They are just interesting talking and arguing points.

All that's necessary at HF is to change the name of the SWR meter to TLI (Transmitter Loading Indicator) and start reasoning from there. Life is really quite obvious and simple, easily understood by novices welcome to this fascinating hobby of ours.

I see through the kitchen (combined computer room) window that dawn has broken. The bottle of Premieres Cotes de Bordeaux is 3 parts empty. And so to bed.

Yours, Reg, G4FGQ

1122. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:38:31 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <GqT0MfAXHIDBFwEq@jmwa.demon.co.uk>
Source record: 91644
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
wrote (in <1kpirajws18ml$.dlg@news.individual.net>) about 'S - Y
Parameter conversion with Smith Chart', on Sun, 1 Aug 2004:
>On Sun, 1 Aug 2004 02:19:02 +0000 (UTC), Reg Edwards wrote:
>
>>> Could you please explain that a bit more? The chart is a graphical way
>>> of doing mathematics. Where does frequency enter the picture?
>
>Reaactance depends on it. I must not understand your question.

Reg wrote that the Smith Chart doesn't work at low frequencies. Since
it's just a way of solving equations, it can't fail to work. What
'fails' is that at low frequencies, either different equations apply
(no) or different terms in the equations become significant (yes).
>>>
>>> If you mean that the characteristic impedances of 'transmission lines'
>>> at low frequencies aren't resistive, I quite agree.
>>> --
>> ================================
>>
>> The characteristic impedances of ALL practical lines aren't resistive.

Well, yes, but at high enough frequencies, the reactive term is small.

Zo^2 = (R + jwL)/(G + jwC)

For high enough w (omega), provided R (series resistance) and G (shunt
loss resistance) are low, Zo^2 = L/C.

> But
>> your statement just about sums up the situation.

You agree with my explanation above, that it's not the chart that
'fails', but that terms in the equations change significance at low
frequencies?
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1123. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:39:48 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <Ea$0AoAkIIDBFwmi@jmwa.demon.co.uk>
Source record: 91645
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that John Larkin <jjlarkin@highlandSNIP
techTHISnologyPLEASE.com> wrote (in <oh4og0d6dh8lj6rqgbks5k44gonil7dk64@
4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on Sat,
31 Jul 2004:
>On Sat, 31 Jul 2004 20:34:48 +0000 (UTC), "Reg Edwards"
><g4fgq.regp@ZZZbtinternet.com> wrote:
>
>>The Smith Chart has served its purpose.
>>
>>It was a much-simplified version of earlier, more complicated charts, dating
>>back to the Victorian age used to solve electrical engineering problems
>>involving complex hyperbolic functions.
>>
>>It applied ONLY to the HF spectrum, serious calculating errors occurr if
>>applied to the LF spectrum and below although few engineers realised this.
>
>
>What's the cutoff frequency below which a Smith Chart won't work?
>
See my post about characteristic impedance at low frequencies.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1124. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 05:41:17 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cehvpt$40v$1@titan.btinternet.com>
Source record: 91643
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

> C'mon Reg, answer the question. What is there about a Smith chart that
> makes it incorrect at low frequencies?
>
> John

==========

There is nothing whatsoever the matter with the chart. It does no more and no less than what it is intended for.

There is everything the matter with the user - begining with a lack of education!

Reg.

1125. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 06:17:55 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1qqjyblf14xnh$.dlg@news.individual.net>
Source record: 91646
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 05:16:58 GMT, Jerry Martes wrote:

> ike

Oh, a nick name.
>
> I have convinced myself that the Smith Chart alows it to be determned if
> it is preferable to add series (+ or - X), or Shunt (+ or - X) depending
> where the complex Z plots on the Chart.

Is it possible that this method of which I have no knowledge could
determine that you need to do this

```
|
C| RFC
C|
C|
|
| || ||
+----||---+-----||--
| || | ||
| C|
|/ C|
-| C|
|> |
|
```

when you really need an LP pi for harmonic suppression? Please
elaborate. Sounds like an excellent contribution waiting to happen
to those who are teachable.

> I really admire the guys who can match impedances with math only. I just
> dont have good study habits, so I'm not smart.

Eh? It's not math. It's arithemetic. Give yourself more credit.

Match 50 + j25 to 50 + j0 .... ok you need -j25 which is a series
cap that suppressed no harmonics or a practical shunt inductor that
does. Assume I'm assuming the application I'm assuming ;)

How do you infer the correct topology from the chart only?

--
Best Regards,
Mike

1126. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 06:49:33 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <1o0Pc.2951$UN2.474@nwrddc02.gnilink.net>
Source record: 91647
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

MMike

I havent learned to type either.

I wrote a short article in Electronic Design magazine in 1966 wherin I outlined a simple way of predicting which combinations of series and shunt reactances would be most appropriate for matching any given impedance. I'd have to re-read it to learn what I wrote. I sure couldnt give any advice about using a Smith Chart from "the top of my head". I've been away from engineering since 1969 when I was layed off from TRW.
The basic thought elaborated on in the article was -- divide the Chart into 8 sections, chosen to identify what combination of reactances are most suited for producing a match. I think that anyone who worked for a short time with impedance matching would find the article unnecessary.
The article included some information on how a Z theta chart can be usefull in analyzing how transmission line transformers effect impedances.
I have forgotten everything I ever knew about Z theta Charts.

"Activ8" <reply2group@ndbbm.net> wrote in message
news:1qqjyblf14xnh$.dlg@news.individual.net...
> On Sun, 01 Aug 2004 05:16:58 GMT, Jerry Martes wrote:
>
> > ike
>
> Oh, a nick name.
> >
> > I have convinced myself that the Smith Chart alows it to be determned
if
> > it is preferable to add series (+ or - X), or Shunt (+ or - X) depending
> > where the complex Z plots on the Chart.
>
> Is it possible that this method of which I have no knowledge could
> determine that you need to do this
>
>
> |
> C| RFC
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> |
> | || ||
> +----||---+-----||--
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> |> |
> |
>
>
> when you really need an LP pi for harmonic suppression? Please
> elaborate. Sounds like an excellent contribution waiting to happen
> to those who are teachable.
>
> > I really admire the guys who can match impedances with math only. I
just
> > dont have good study habits, so I'm not smart.
>
> Eh? It's not math. It's arithemetic. Give yourself more credit.
>
> Match 50 + j25 to 50 + j0 .... ok you need -j25 which is a series
> cap that suppressed no harmonics or a practical shunt inductor that
> does. Assume I'm assuming the application I'm assuming ;)
>
> How do you infer the correct topology from the chart only?
>
> --
> Best Regards,
> Mike

1127. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 06:55:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cei446$3f$1@hercules.btinternet.com>
Source record: 91648
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Cecil says,
> All graphs are redundant and can be replaced by equations or tables.
> However, a picture (graph) is still worth a thousand words (or numbers).
> A glance at a graph tells me more than an hour of studying endless rows
> and columns of numbers.
> --
==========

Depending on our particular educational history, we all have our separate preferred ways of studying technical situations. And we all usually come to the same correct conclusions.

I too become exhausted by studying endless rows and columns of mere numbers.

Graphs are indeed very useful. But I often find that the form of a mathematical equation provides just as deep an insight into what is really going on in the practical world. Praps I am fortunate at being equally adept at both analytical forms. It must have begun during my school days.

The advantage of equations over graphs is that they are nearer to the quantitative than they are to the qualitative world. They are more precise. And in engineering it is numbers which, ultimately, matter most.

Reg, G4FGQ

1128. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 07:44:19 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <2rSoc3AT9JDBFwSz@jmwa.demon.co.uk>
Source record: 91649
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
wrote (in <1qqjyblf14xnh$.dlg@news.individual.net>) about 'S - Y
Parameter conversion with Smith Chart', on Sun, 1 Aug 2004:

>How do you infer the correct topology from the chart only?

You can't. But then the chart doesn't act as a typewriter or Turkish
bath, either. The chart will give you both T and pi solutions. You make
the choice between them on other grounds, such as harmonic suppression.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1129. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 07:56:32 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <Lm1Pc.27007$mg6.1485@fed1read02>
Source record: 91650

"Bill Turner" <noway@nohow.com> wrote in message
news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt <spamfree@myhome>
> wrote:
>
> >to get to our 1200
> >baud modems...
>
> --
>
> Newbie. REAL OT's had 300 baud modems. :-)
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

Acoustic!!!!

Ed
wb6wsn

1130. Re: AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 08:03:55 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0408010003.1117d513@posting.google.com>
Source record: 91651

Bob Bob <bcnntp@optusnet.com.au> wrote in message
news:<shbrt1-l7l.ln1@p400bob.lse.com.au>...
> Lots of possibilities here...
>
> How about a longish piece of wire attached to the terminal and another
> from the ground terminal (if any) to "real ground"?
>
> Or maybe wind a loop antenna on a smallish (say 8") former?

Pretty easy...The hardest part is finding a suitable variable capacitor...And thats not hard really...You can order them on the web. I've been making some simple PVC loops. I have a 16 inch circle loop wound on a humidifier blower housing, and I have a bigger diamond loop made from PVC. It's very simple. A 2 inch PVC mast, and 1 inch "actually 3/4" PVC crossarm that is fitted through drilled holes in the larger PVC mast. It's 6 ft tall counting the mount, 5 ft across, and is 44 inches per side. "5 turns". I have switched multi-gang variable caps, and also some fixed value caps for LW, and can tune from about 200 kc to about 2.4 mhz, if I remember right. That thing will blow the doors off any real small loop. But my 16 inch loop works well also. The s/n ratio is better on the large loops, but if the radio is sensitive, even a small one will do ok.
I have one simple PVC design on my web site. I made one of those for a guy on the shortwave NG, and he seemed to like it. Was all the standard 3/4 inch PVC, and T's, etc...With that wood mount I made for his, it rotates, and can also tilt. It clamps to his table. All the parts are at any home depot, Lowes, etc.. Well, except the capacitor...I scrounge some from old analog 70's, 80's stereo receivers.
They have multi gang caps that are great for MW loops. BTW, my usual radio for MW is my IC-706mk2g. Nothing fancy, but it is a great MW radio for casual use. Has a pretty wide stock bandwidth, and the audio is fairly decent. Much better than some ham receivers with tight stock 4.8 kc filters for AM. I get plenty of signal from either loop for the 706. No preamps needed. My loops are both on the floor on heavy stands, and can rotate. Nothing beats a good large loop for daytime MW...:) I regularly listen to San Antonio, Austin, etc, just like I'm a local.."I'm in Houston". Also works great at night, but the nulls are not as deep as in the day. Still better than a longwire though for busy freq's. MK

SIMPLE PVC LOOP DESIGN
http://web.wt.net/~nm5k/loop5.jpg

1131. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 08:20:09 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410ca7bd$1@news.vo.lu>
Source record: 91652

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:410c48b8_1@news1.prserv.net...
> Thierry:
>
> Before you get someone killed, hire some competent high iron workers.
> Anyone who drops a section of tower because they are uninformed on tower
> safety is going to raise the insurance rates for everyone, never mind the
> human life you may take.

Hi,

I think that we know that my friend. This is not our first tower and we all already have do similar installations, and I even wrote a short article about it as well http://www.astrosurf.com/lombry/qsl-rotator-tower.htm p2-5. However I am personally less familiarized with such a job than my friends. But on the contrary I was more security oriented that most of them. But as there was only one director on the field, I could always go against his decision or we have no more time to buy the additional material. All people were in site and we had to erect the tower now, not tomorrow...
That said in practice we could do the job without problem, even if not everybody had an helmet or gloves for example and didn't think that some pulley 'd break.

3 people climbed on the tower : 2 most of the time and a third to check some detail. There was also only with people directing the work.
One of us was specialist in aluminium work (on plane, etc), another one was expert in scaffolding before he retired and a third used to work on sloping roof and on high chimneys. We have not really high iron workers.

For the gin-pole the guy who built it in assembling 2-3 tubes recognized immediately that his system was faulty. But is worked up to over 10m high without problem as long as the all system was well check and secure with ropes (4mm steel cable, the one use by the eletrical winch).

Of course I think that in erecting any tower we learn something new each time.

This time, 2 rollers attached to the lift system (a new one) made of steel broke !, we lost two other pulleys because they were made of teflon. They were replaced with steel ones. Hopefully we had full of spare parts up to mini-clamps because we already learnt lessons from previous similar experiences. Even the winch (a new one) didn't wind correctly and we had to unwind it completely and wind it up without making knots. This steel cable 4mm think will be replaced by a new 50m roll.

But the simpler the best : another time to another friend who desired to erect a 14m high cranking tower (from the same manufacturer) 60 cm wide (8 years ago now) we simply assembled all the tower horizontally at ground level, then pulling on ropes to erect it progressively vertically. This method was faster and much simpler. We were 18 people, 15 at ground pulling, 2 other holding the tower and a third in a tree with a "tire-fort" (sort of manual winch, cannot translate). This solution worked perfectly without error or broken part. Good to know.

Thierry

>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
>
>

1132. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 08:40:13 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410cac71$1@news.vo.lu>
Source record: 91653

"Jack Painter" <223bthp@cox.net> wrote in message
news:5vYOc.20119$fm2.8359@lakeread02...
>
> "Crazy George" wrote
>
> > Before you get someone killed, hire some competent high iron workers.
> > Anyone who drops a section of tower because they are uninformed on tower
> > safety is going to raise the insurance rates for everyone, never mind
the
> > human life you may take.
>
> Hey George, you know...
> the purpose of some people's lives is to serve as a warning to others...

Why Jack, did you never do a mistake in your life... ?

We are not ironworkers but simply radio amateurs expert in various other fields. However, many are used to work with electronic parts, steel bar or aluminium or have discussed a lot with specialists or people having already do similar works.
Ou group has erected a lot of antennas in our area (they are several major ham radio club around here and thus many amateurs who have the place to erect a beam) to know what are risks and how to proceed.

Unfortunately each time, the tower is different (bigger, smaller, with a lift, placed on a roof, cranking or not, etc) and sometimes the owner hasn't think about all detail or did'nt buy all required part because they were not available in the shop when he did his purchases.
We often discover that only once on site, even if we speak longtimes before, often during meeting at radio clubs or even by echolink or visiting the installation of other amateurs using similar tower.
In this last experience, the owner visited 8 times a friend having erected a similar tower to be sure of all detail (mainly how worked the winch to lift the cage and how he fixed his heavy duty rotator on top on the cage to avoid that the beam element touch the tower.

Many people think that they are able to do any kind of job without looking for information. This is far to be true because most of the time, as amateurs, we often imagine complex solutions instead of the simpler ones. Many of them refuse or rather don't think about the security issues (of people and material) and buy often undersized tubing or accessories.
This is here that problem began, reason for which some of us have a spacial suitcase full of quality parts and of various sizes, from the mini to the largest. But the chance and hasard (risks) are never far away, like Murphy...

Hopefully the smartest of us and also handymen and have a long experience in their back and have gathered many field experience and know usually was is good and was is faulty or to avoid. They gathered also a lot of tools and their long experience is appreciated.
So all together we usually do an excellent job, at the condition that the owner buy all parts that we listed or suggest him to buy and don't forget any tool and doesn't sacrifiy the quality for a few euros...

Thierry

>
> Jack
> Virginia Beach VA
> fmr Journeyman Ironworker
> local 348 Erie PA
>
>

1133. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 09:15:14 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Dw2Pc.21076$fm2.10916@lakeread02>
Source record: 91654

"Thierry" wrote
>
> "Jack Painter" wrote
> > "Crazy George" wrote
> >
> > > Before you get someone killed, hire some competent high iron workers.
> > > Anyone who drops a section of tower because they are uninformed on
tower
> > > safety is going to raise the insurance rates for everyone, never mind
> the
> > > human life you may take.
> >
> > Hey George, you know...
> > the purpose of some people's lives is to serve as a warning to others...
>
>
> Why Jack, did you never do a mistake in your life... ?

Thierry, there are some places and some jobs where if you make a mistake, people, either yourself or others or both, will be killed. Amateur Radio is not defined as one of these occupations, and no amateur has any business working aloft with rigging and equipment unless he was properly trained in that field. That certainly doesn't stop many from doing it, but it doesn't make it safer because they survive it. The skills sets that seem to congregate in radio are amazing for sure, and the field-expediant thinking and can-do attitudes are good for all invoved in the hobby. But there are some things better left to professionals. Anyone who doesn't think a lot of Ironworkers die doing what they do better than anyone else could, is just delusional. The bravado I've witnessed from so called antenna-tower experts far outweighs their knowledge of safety, strength of materials, rigging principles, or safe working aloft. Even the better ones at it are not properly qualified to train others, and so often enlist any brave soul they can find as riggers, connectors, ground support, etc. All the blind leading the blind. I happen to know better than to work with untrained people at the effort of erecting antenna towers. I knew better when I erected steel as a professional and I still know better 20 years later. But as I said, some people's purpose in life is to serve as a warning to others. Don't let one of your friend's falling to his death make your club that purpose. Hire a professional company and take pictures from a safe distance.

73,
Jack

>
> We are not ironworkers but simply radio amateurs expert in various other

> fields. However, many are used to work with electronic parts, steel bar or
> aluminium or have discussed a lot with specialists or people having
already
> do similar works.
> Ou group has erected a lot of antennas in our area (they are several major
> ham radio club around here and thus many amateurs who have the place to
> erect a beam) to know what are risks and how to proceed.
>
> Unfortunately each time, the tower is different (bigger, smaller, with a
> lift, placed on a roof, cranking or not, etc) and sometimes the owner
hasn't
> think about all detail or did'nt buy all required part because they were
not
> available in the shop when he did his purchases.
> We often discover that only once on site, even if we speak longtimes
before,
> often during meeting at radio clubs or even by echolink or visiting the
> installation of other amateurs using similar tower.
> In this last experience, the owner visited 8 times a friend having erected
a
> similar tower to be sure of all detail (mainly how worked the winch to
lift
> the cage and how he fixed his heavy duty rotator on top on the cage to
avoid
> that the beam element touch the tower.
>
> Many people think that they are able to do any kind of job without looking
> for information. This is far to be true because most of the time, as
> amateurs, we often imagine complex solutions instead of the simpler ones.
> Many of them refuse or rather don't think about the security issues (of
> people and material) and buy often undersized tubing or accessories.
> This is here that problem began, reason for which some of us have a
spacial
> suitcase full of quality parts and of various sizes, from the mini to the
> largest. But the chance and hasard (risks) are never far away, like
> Murphy...
> Hopefully the smartest of us and also handymen and have a long experience
in
> their back and have gathered many field experience and know usually was is
> good and was is faulty or to avoid. They gathered also a lot of tools and
> their long experience is appreciated.
> So all together we usually do an excellent job, at the condition that the
> owner buy all parts that we listed or suggest him to buy and don't forget
> any tool and doesn't sacrifiy the quality for a few euros...
>
> Thierry
>
> >
> > Jack
> > Virginia Beach VA

> > fmr Journeyman Ironworker
> > local 348 Erie PA

1134. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 10:41:09 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <t3ipg0dqf0akrehj30pbdb8toekqq6r4kq@4ax.com>
Source record: 91655
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Sun, 1 Aug 2004 01:23:40 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote in <ybOdnYWVusnM45HcRVn-qQ@comcast.com>:

>
>"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
>news:uvbog0poc1ireh2pn3326go70jiaa6hnsq@4ax.com...
>> As for those who think a mag-mount works because of capacitive
>> coupling to the mounting surface, I would suggest you actually try to
>> measure this capacitance -- you will find that it's not nearly enough
>> to make an effective counterpoise connection unless your frequencies
>> are considerably higher than 27 MHz.
>
>Not really. Consider a magnetic base of 2 inches in diameter sitting on a
>painted metal
> surface with 0.010 inches of paint. Then as an approximation I looked up
>the dielectric constant for epoxy, 3.62, to use for the paint.
>
>Cpf = 0.225 * Er * A / T
>
>Where Cpf is the capacitance in pf
>Er is the dielectric constant
>A is area of one plate of the capacitor
>T is the distance between the two plates
>
>All dimension in inches.
>
>The above example works out to C = 255.88pf
>
>The reactance of 256pf at 27MHz is 23.03 ohms. If the paint dielectric is
>higher, paint thinner, or the antenna base larger in diameter, then the
>reactance would be even lower. Remember this is reactive, not resistance. By
>adjusting the antenna a bit you can compensate for this.

Reality has a way of introducing unforseen factors into the equation,
such as the increased distance and air gaps between the plates caused
by the non-scratch surface of the base (which sets the dielectric
constant closer to 1), the paint/primer/wax resistive and dielectric
properties at RF frequencies (which, for many substances, is radically
different than when measured at the frequencies used to determine the
referenced constants), the ESR due to poor RF conductivity of steel (a
ferromagnetic material) when saturated by a magnetic field at the
point of contact, etc, etc. And don't forget that this capacitive
reactance and ESR must be added to the ground impedance of the vehicle
at the point of contact, which, as we all know, isn't exactly ideal.

Regardless, my suggestion was to measure it, not calculate it. It's easy to measure yourself -- just find yourself an old mag-mount antenna, remove the whip and loading coil, lop off all but a couple inches of the coax, strip the coax shield, plonk it right next to a permanent mount and measure the impedance between the shield and ground with an impedance bridge. It's big. Typically it will measure several hundred ohms, which is a pretty crappy ground. If you can, remove the magnet from the mount, measure again and note the difference.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1135. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 10:44:31 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410cc993$1@news.vo.lu>
Source record: 91656

"Jack Painter" <223bthp@cox.net> wrote in message
news:Dw2Pc.21076$fm2.10916@lakeread02...
>
> "Thierry" wrote
>...
> people's purpose in life is to serve as a warning to others. Don't let one
> of your friend's falling to his death make your club that purpose. Hire a
> professional company and take pictures from a safe distance.

Jack,

I perfectly agree with you and I do it each time that I estime the projet over my skills and know-how, what could be this subject (electricity, problem with my car, building, etc), all the less that I not pretend to be an handyman.

Other times, if the job is not too big, without any risk (not heavy parts, electricity involved, etc) I try to do it, to learn and to experiment by myself. Of course sometimes I do small mistakes like many amateurs probably, but I learn a lot too.

However, we cannot refuse to help friends who prefer do the job themselves with skilled or experimented friends (we erected 8 towers now) than calling for a specialized company, much more expensive. OK the security will be ensured, the job will be well done and this without any risk for the amateurs. This is the advantage of callign an expert. But you also need a lot of money. Of course this is a choice : you hire a expert of buy a new amplifier for the same price, hi !

On my side I erected a light tower 30cm wide 12m high for a 3-ele beam in company with 5 people only pulling on steel cables and using "tire-fort" (kind of manually winch). Easy, it was erected in less than one hour and with risks reduced to the minimum as there was nobody "below" or near the tower when we lift it up pulling on ropes and cables (the advantage of this solution).
The beam was put in place using a simple steel cable (4mm tick) and 2 steel pulleys (top and down). Here also the only risks were that the steel cable or the antenna elements or boom break during the lift... What what the risk ? Quasi none as the lift last less than 5 minutes. T
the beam weight was 12 kg and I do not know any antenna that broke under such condition.

Refute me if needed, but I think that for such a small installation, relatively light, it is not necessary to entrust it to a specialized company, excepting if the owner is old and no more confident in his strenght or if he can count on freidns to help him. But a few young men 30-50 years

old can do the job with ease if all is well prepared, the briefing complete, and the simulation well done before by people having already proceeded to such installation. Of course for a novice this is a job at risk as he will use for the first time maybe a winch or other tools...
Therefore, we are a few people to have a lot experiment and we try to help the novice to avoid mistakes, but as I told you we cannot avoid that the owner buy accessories of poor quality, and the risk is well there I recognize... but we cannot always come with our own gin pole or accessories.

But this time I learnt the lesson as well, and we will build a few more gin poles (in steel) to avoid it breaks next time that someone ask us to erect a pylon by this way. The gin pole used this time was in fact the only tool that 'd have been of the highest quality after the tower sections. Unfortunately it didn't belong to our team...

Now, if I had to do the job for me again installing a larger tower (say 50 cm wide, 12 m high for a 5-ele beam or so) or stacked beam for HF bands for friends, I 'll deny and I will entrust this job to an specialized company to avoid any accident. I am not fool yet. As you told, preserving the life of people if more important than spare some money.
We refused only once such a job and your friend called a small crane for help.

73
Thierry, ON4SKY

>
> 73,
> Jack
>
>..
> >
> > Thierry
> >
> > >
> > > Jack
> > > Virginia Beach VA
> > > fmr Journeyman Ironworker
> > > local 348 Erie PA
>
>

1136. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 10:57:55 UTC
From: matt wilson <mwilson2@nospam.bigpond.net.au>
Message-ID: <T04Pc.26967$K53.16380@news-server.bigpond.net.au>
Source record: 91657

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:HQ7NZ7FXU7CBFAuN@ifwtech.co.uk...
K7MEM wrote:
>matt wilson wrote:
>> I have a 1.8m fibreglass rod from a 27Mhz whip, to which I have added
>>braiding to make a 1/4 wave at 52Mhz.
>> Now, I still have a foot of glass left at the top and I'm
>>interested in making it resonant at 10m as well. I understand how to
>>make traps for a given frequency, but not how to calculate what that
>>frequency should be in the case of a non-resonant trap.
>> As I understand it, a trap at resonance 'somewhere' between 29 and
>>52 Mhz can be added to a whip that will electrically lenghten it into
>>resonance at 10m, and electrically shorten it into resonance at 6m.
>> What I don't understand is exactly how one calculates:
>> The traps own resonance
>> The equilant physical length of the trap at a given frequency, and
>> The lengths of the radiating segments, allowing for loading and
>>mutual coupling.
>> I appreciate that some "real world" tweaking of the design is
>>almost always required, but how is the basic layout produced? Is it
>>possible to calculate in advance which combinations will work well
>>and which won't?
>
>Well, you almost have it correct. The trap should resonate in the
>middle
>of the band you wish to operate.

Not always. Matt knows exactly what he's looking for - he really does
mean a trap that is resonant *between* the two target bands!

The parallel L/C circuit will appear inductive on the lower band, so it
makes the antenna electrically longer; while on the higher band it
appears capacitive and makes the antenna electrically shorter. The trick
is to work out how to make the whole antenna resonant on both bands
simultaneously.

The original idea was in 'Ham Radio' several years ago:
Designing trap antennas: a new approach by Yardley Beers, W0JF Aug 87
p60

Unfortunately I don't have the reference itself, but maybe someone here
has either the magazine or a CD?

This antenna is much harder to design than a conventional system with
resonant traps, because no individual part of the antenna is resonant on
either band. It needs either a lot of cut-and-try, or a little help from

a computer.

There might have been a BASIC listing in the original article, but I'd
bet that Reg could knock together a program before bedtime :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

Exactly so. The problem is not how to make a trap for X Mhz, its knowing HOW to calculate X in the first place. I have done a search of the internet & not found anything that gives the principles behind it. I can find any number of 'tried and true' designs for other bands, but I cannot simply scale them as a) the relative frequencies are different and b) involve symmetrically trapping a dipole wheras this is a Marconi antenna.

I might presume that one would make the capacitive loading on one band equal to the inductive loading on the other. In that case, 'X' would be that frequency at which the ratio of 29 Mhz to 'X' would be the same as 'X' to 52 Mhz?

1137. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 11:02:23 UTC
From: Dave <noone@nowhere.com>
Message-ID: <bM-dnSvcA_BeUJHcRVn-gw@crocker.com>
Source record: 91658

you young-uns are all alike... think you had it tough. heck, in my day we only had 110 baud acoustic modems and had to save our programs on punched paper tape! by gollee by gum and we had to walk uphill 10 miles both ways to school in raging blizzards with 50# bookbags.

"Ed Price" <edprice@cox.net> wrote in message
news:Lm1Pc.27007$mg6.1485@fed1read02...
>
> "Bill Turner" <noway@nohow.com> wrote in message
> news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> > On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt <spamfree@myhome>
> > wrote:
> >
> > >to get to our 1200
> > >baud modems...
> >
> > ____
> >
> > Newbie. REAL OT's had 300 baud modems. :-)
> >
> > --
> > Bill, W6WRT
> > QSLs via LoTW
> >
>
> Acoustic!!!!
>
> Ed
> wb6wsn
>

1138. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 11:21:02 UTC
From: rc <rc@roncrowley.dot.com>
Message-ID: <36kpg01v0uff6ndb6elkp5tvgg99h4uv8d@4ax.com>
Source record: 91659
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Thu, 29 Jul 2004 18:35:40 GMT, "DSL"
<retiredltNOSPAM@NOSPAMoptonline.net> wrote:

>For more information and daily updates please visit:

Where do people get the notion that the first ammendment gives them
the right to write anything about anyone for any reason?

I hope Radio Shack kicks your ass!

Ron, W1WBV

1139. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 11:27:35 UTC
From: mike <n0qfv@stic.net>
Message-ID: <410cd3a2$0$74192$39cecf19@news.twtelecom.net>
Source record: 91660

Ed Price wrote:
> "Bill Turner" <noway@nohow.com> wrote in message
> news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
>
>>On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt <spamfree@myhome>
>>wrote:
>>
>>
>>>to get to our 1200
>>>baud modems...
>>
>>_____
>>
>>Newbie. REAL OT's had 300 baud modems. :-)
>>
>>--
>>Bill, W6WRT
>>QSLs via LoTW
>>
>
>
> Acoustic!!!!
>
> Ed
> wb6wsn
>
Yeah really want slow. . . you ain't done slow till you done 110 Baud.

QFV

1140. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 11:32:39 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <sx4Pc.21339$fm2.6403@lakeread02>
Source record: 91661

"Thierry" wrote
> But this time I learnt the lesson as well, and we will build a few more
gin
> poles (in steel) to avoid it breaks next time that someone ask us to erect
a
> pylon by this way. The gin pole used this time was in fact the only tool
> that 'd have been of the highest quality after the tower sections.
> Unfortunately it didn't belong to our team...

> We refused only once such a job and your friend called a small crane for
> help.
>
> 73
> Thierry, ON4SKY

Thierry, Few people organize their thoughts as well as you do my friend. And so it is likely that any job you participate in is equally well planned. But the point is, you guys are learning this as you go along, and the gin-pole incident is not by any means the only occassion you will have to discover a new principle, strength/weakeness, fault, improper manufacturing or material failure, improper tools, breakage of tools, physical exhaustion of a team member at a critical time, unexpected wind condition, improper response to a command or order at a winch, line, etc. And each time those things happen, your fingers, hands, feet and possibly life will be at risk. In the Ironworkers, we could explain why working at 20, 30 or more stories in the air was really no special feat. It comes with the understanding that all injuries happen between 0-40' (10 meters). After that, you're either dead, or wish death would release you from the disfiguring and crippling pain. So beyond 10 meters, if you fall, it's not going to hurt any worse. You better get used to the fact that you can and will have injuries so bad from a 2-10 meter fall into or around steel that you will never be the same again, if you live. When you fall or are trapped or pinned against steel, cable and machinery, it's not like twisting an ankle on the rugby field. What I know you want to believe but your mates seem unable to take seriously is, you are not riggers! You are old men who have no business up in the air. You belong ON THE AIR, not it it ;-) Paste those pictures of your rigging days upon the club walls and stop your friends from believing they can think these jobs out. They can't. In addition to knowledge of theory, ironworking is alot of brute strength and stamina from doing that every day. When it comes to rescuing someone from a pin or preventing a fall, it's like expecting children or the elderly to be firefighters. They might want to help, but desire is not enough. You get this speech so you can copy it to your mates, as I know you already agree with it.

Best regards,

Jack

1141. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 12:35:33 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <ps5Pc.4920$cK.4392@newsread2.news.pas.earthlink.net>
Source record: 91662

"mike" <n0qfv@stic.net> wrote in message
news:410cd3a2$0$74192$39cecf19@news.twtelecom.net...
> Ed Price wrote:
> > "Bill Turner" <noway@nohow.com> wrote in message
> > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> >
> >>On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt <spamfree@myhome>
> >>wrote:
> >>
> >>
> >>>to get to our 1200
> >>>baud modems...
> >>
> >>____
> >>
> >>Newbie. REAL OT's had 300 baud modems. :-)
> >>
> >>--
> >>Bill, W6WRT
> >>QSLs via LoTW
> >>
> >
> >
> > Acoustic!!!!
> >
> > Ed
> > wb6wsn
> >
> Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>
> QFV

In the Summer of 1970 I worked for NASA on the Tektite II project, St Johns,
US Virgin Islands.
I was a behavior observer when I wasn't operating my Swan or diving.
We took data on IBM cards by punching holes with a stylus.
Manually, like they used to vote in Florida.

The cards were then taken by boat to an engineering firm on St Thomas that
could put them in a card reader and transfer the data to magnetic tape.
The tape was then flown to Austin, Texas for analysis. That was slow.

For ham radio I used a dipole. Phone patches back to Texas were consistently
more reliable than the local phones.

Now in my job I plan on remoting data acquisition in remote areas via a satellite internet connection.

My "dial-up" was a TI Silent 700; circa 1977.

73
H.
NQ5H

1142. Re: AM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 12:50:30 UTC
From: StrikitRich <strikitrich@nospam.excite.com>
Message-ID: <strikitrich-102619.08503001082004@comcast.dca.giganews.com>
Source record: 91663

In article <410ae907$0$29446$afc38c87@news.optusnet.com.au>,
"Robert and Karen Gilland" <rjk1996@optushome.com.au> wrote:

> I want a simple AM Antenna to connect to my hi-fi system.
> I really like AM but I cannot access it at the moment.
>
> Does anyone know where I could get an AM Antenna for a Hi-Fi in Australia
>
> Regards,
>
> Robert.

I would see if you can get one of the Select-A-Tenna models, or the Terk
AM loop that wires right in to your stereo. Al ot depends on the type
of building you are in, so you might need to position the antenna near a
window.

Try this site, http://www.ccrane.com/am-antennas.aspx for some ideas,
and if there is not a dealer in Australia, try eBay or the like.

SR1

1143. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 12:59:36 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <YO5Pc.22027$iK.891@newsread2.news.atl.earthlink.net>
Source record: 91664

>
> Thierry, there are some places and some jobs where if you make a mistake,
> people, either yourself or others or both, will be killed. Amateur Radio
is
> not defined as one of these occupations, and no amateur has any business
> working aloft with rigging and equipment unless he was properly trained in
> that field. That certainly doesn't stop many from doing it, but it doesn't
> make it safer because they survive it. The skills sets that seem to
> congregate in radio are amazing for sure, and the field-expediant thinking

Even hiring a professional crew is not a gurentee that nothing will hapen.
I have seen an I beam weighing several hundred pounds fall about 100 feet
when it slipped out of what was holding it on the crane wire. Not too long
ago a man and his son was killed while painting a 800 foot tower and the
wench hung up and tossed them off the tower. They should have known beter
but they did not have all their safety lines hooked up.

1144. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 14:05:26 UTC
From: I ain't George either <KennelMaster@not-here.com>
Message-ID: <GM6Pc.10551$_25.1129@fe2.texas.rr.com>
Source record: 91665
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Leland C. Scott" <kc8ldo@arrl.net> wrote in message
news:ZeGdnSRl5JUA45HcRVn-hQ@comcast.com...
>
> "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
> news:jJednec7ptbk1pHcRVn-hg@comcast.com...
> > Unless you are using a 1/4 wave VHF antenna, make sure it has a strong
> > magnet, or magnets. I had a 5/8 wave 2m antenna on a name brand mag
mount
> > blow off the roof.
>
> MFJ?
>

Mighty Fine Junk?

1145. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 14:50:07 UTC
From: Mike Yetsko <joe@user.com>
Message-ID: <10gq1io5fd3jv74@corp.supernews.com>
Source record: 91666
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"DSL" <retiredltNOSPAM@NOSPAMoptonline.net> wrote in message
news:V%aOc.18881$oE1.1782652@news4.srv.hcvlny.cv.net...
> Your Freedoms are in jeopardy! RadioShack Corporation has filed an
> injunction in a Texas Court that has shut down an opinion website,
> http://www.radioshacksucks.com, in direct violation of the Freedoms of
> Speech, Expression and Peaceful Assembly, as guaranteed to us by the
> Constitution of the United States. If other companies learn of this, they
> will use it against any website that speaks out against that company. This
> is extremely dangerous, as it will change the face and scope of the
> Internet.

Usually when I see someone bitching about Radio Shack it's from one of
the small brained no-lifers who get their kicks from going to Radio Shack
and trying to show off how much more technically intelligent they are than
the clerks behind the counter.

Unfortunately, I can't make an assessment of your web site to see if it's
of the same ilk, because it appears to be shut down.

Awww.....

Let's all say 'Too F...in Bad" in unison. Doesn't seem like you're getting
the
internet support you wanted!

If you don't like Radio Shack, why do you go there? Unless, of course,
you like the abuse you think you get, and go just to get more ammo!

Wait, I didn't come here for abuse, I came for an argument! Arguments
are two doors down on the right.

1146. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:06:02 UTC
From: Landshark <s3buell@sbcglobal.net>
Message-ID: <uF7Pc.5328$AY5.3188@newssvr21.news.prodigy.com>
Source record: 91667
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Leland C. Scott" <kc8ldo@arrl.net> wrote in message
news:FOCdnemcHvW-6JHc4p2dnA@comcast.com...
>
> "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> news:20040731214036.252$vP_-_@newsreader.com...
> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> >
> > -snip good points-
> >
> > Hi Lee,

Yup, that looks like a threat..... LOL!!!

>> are you going to the Woodward dream cruise this year?

Same as above X2

>> I am
> > as long as we don't have another east coast power failure.

Same as above X3

>> ;)

OH, this must be the threat, o.k. ;)

>
> Why? You want to know when I won't be home so you can slip over here and
> stick another note under my door like a chicken.
>
> Leland C. Scott
> KC8LDO

LOL!!! talk about paranoia ..... All he did was ask
a question, no over tones of any sort, you come back with this
paranoid statement.

Landshark

--
Real heroes are men who fall and fail
and are flawed, but win out in the end
because they've stayed true to their
ideals and beliefs and commitments.

1147. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:10:31 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <7I7Pc.2473$Jo1.1107@lakeread01>
Source record: 91668

"Jack Painter" <223bthp@cox.net> wrote in message
news:5vYOc.20119$fm2.8359@lakeread02...
> >
> Hey George, you know...
> the purpose of some people's lives is to serve as a warning to others...
>

European Darwin Awards???

Uncle Pete

1148. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:12:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cej18cjcq1@titan.btinternet.com>
Source record: 91669

> Exactly so. The problem is not how to make a trap for X Mhz, its knowing
HOW
> to calculate X in the first place. I have done a search of the internet &
not
> found anything that gives the principles behind it. I can find any number
of
> 'tried and true' designs for other bands, but I cannot simply scale them
as a)
> the relative frequencies are different and b) involve symmetrically
trapping a
> dipole wheras this is a Marconi antenna.
>
> I might presume that one would make the capacitive loading on one band
equal
> to the inductive loading on the other. In that case, 'X' would be that
> frequency at which the ratio of 29 Mhz to 'X' would be the same as 'X' to
52
> Mhz?
>
==========

For ages, I have had at the back of my mind this particular problem.

Input data to a program consists of overall antenna length, the location of the trap along the wire, and the two antenna resonant frequencies.

Required output data are the L and C values of the trap. There's no interest in what the resonant frequency of the trap may be.

Apparently the solution lies in solving a pair of simultaneous equations.

But the situation is aggravated by the fact that there will be no solution for some values of input data because the computer will be asked to find the squareroot of minus one or to attempt some other equally impossible task.

For other values of input data there will be multiple solutions for L and C involving their negative values.

And for many solutions, impractical values of L and C will occur.

The program user would be obliged to go through the same mental contortions as he would when experimenting with hardware in his backyard.

There would be a great amount of work for me to produce a pair of simultaneous equations in a form suitable for computer implementation for a very few number of users. But I'll continue thinking about it.

Reg, G4FGQ

1149. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:19:16 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1mc55eaaf5o18.dlg@news.individual.net>
Source record: 91670
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 1 Aug 2004 06:38:31 +0100, John Woodgate wrote:

> I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
> wrote (in <1kpirajws18ml$.dlg@news.individual.net>) about 'S - Y
> Parameter conversion with Smith Chart', on Sun, 1 Aug 2004:
>>On Sun, 1 Aug 2004 02:19:02 +0000 (UTC), Reg Edwards wrote:
>>
>>>> Could you please explain that a bit more? The chart is a graphical way
>>>> of doing mathematics. Where does frequency enter the picture?
>>
>>Reaactance depends on it. I must not understand your question.
>
> Reg wrote that the Smith Chart doesn't work at low frequencies. Since
> it's just a way of solving equations, it can't fail to work. What
> 'fails' is that at low frequencies, either different equations apply
> (no) or different terms in the equations become significant (yes).
>>>>
>>>> If you mean that the characteristic impedances of 'transmission lines'
>>>> at low frequencies aren't resistive, I quite agree.
>>>> --
>>> ================================
>>>
>>> The characteristic impedances of ALL practical lines aren't resistive.
>
> Well, yes, but at high enough frequencies, the reactive term is small.
>
> Zo^2 = (R + jwL)/(G + jwC)
>
> For high enough w (omega), provided R (series resistance) and G (shunt
> loss resistance) are low, Zo^2 = L/C.
>
>> But
>>> your statement just about sums up the situation.
>
> You agree with my explanation above, that it's not the chart that
> 'fails', but that terms in the equations change significance at low
> frequencies?

Makes sense to me, but I think you're asking Reg, judging by the
number of quote ">" characters.
--
Best Regards,
Mike

1150. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:24:54 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <1s0gjpwyci1o8$.dlg@news.individual.net>
Source record: 91571
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 06:49:33 GMT, Jerry Martes wrote:

> MMike
>
> I havent learned to type either.
>
> I wrote a short article in Electronic Design magazine in 1966 wherin I
> outlined a simple way of predicting which combinations of series and shunt
> reactances would be most appropriate for matching any given impedance. I'd
> have to re-read it to learn what I wrote. I sure couldnt give any advice
> about using a Smith Chart from "the top of my head". I've been away from
> engineering since 1969 when I was layed off from TRW.

Oh, your just a boatload of good news from the past :(The TRW here
in this area (valve division) is moving to Asia. The state offered
them money to stay, but it was too late. Mgmt had already issued the
decree.

> The basic thought elaborated on in the article was -- divide the Chart
> into 8 sections, chosen to identify what combination of reactances are most
> suited for producing a match. I think that anyone who worked for a short
> time with impedance matching would find the article unnecessary.
> The article included some information on how a Z theta chart can be
> usefull in analyzing how transmission line transformers effect impedances.
> I have forgotten everything I ever knew about Z theta Charts.

So is that EDN and would they have the article online?
>

--
Best Regards,
Mike

1151. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:27:12 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040801112712.669$rh@newsreader.com>
Source record: 91572
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Landshark" <s3buell@sbcglobal.net> wrote:
> "Leland C. Scott" <kc8ldo@arrl.net> wrote in message
> news:FOCdnemcHvW-6JHc4p2dnA@comcast.com...
> >
> > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> > news:20040731214036.252$vP_-_@newsreader.com...
> > > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > >
> > > -snip good points-
> > >
> > > Hi Lee,
>
> Yup, that looks like a threat..... LOL!!!
>
> >> are you going to the Woodward dream cruise this year?
>
> Same as above X2
>
> >> I am
> > > as long as we don't have another east coast power failure.
>
> Same as above X3
>
> >> ;)
>
> OH, this must be the threat, o.k. ;)
>
> >
> > Why? You want to know when I won't be home so you can slip over here
> > and stick another note under my door like a chicken.
> >
> > Leland C. Scott
> > KC8LDO
>
> LOL!!! talk about paranoia ..... All he did was ask
> a question, no over tones of any sort, you come back with this
> paranoid statement.
>
> Landshark
>
LOL..lelnad is a sniveling shit bag.

1152. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 15:36:40 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040801113640.084$B3@newsreader.com>
Source record: 91573
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

"Leland C. Scott" <kc8ldo@arrl.net> wrote:
> Not really. Consider a magnetic base of 2 inches in diameter sitting on a
> painted metal
> surface with 0.010 inches of paint. Then as an approximation I looked up
> the dielectric constant for epoxy, 3.62, to use for the paint.
>
LMFAO! Look how lelnad the fuckstick ran his coax into his section
eight apartment.

http://img32.exs.cx/my.php?loc=img32&image=scan59.jpg

Yea..he's an expert at this stuff. <eg>

1153. Re: Two slim jims in one pvc tube???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 16:32:22 UTC
From: Luc <luco53@hotmail.com>
Message-ID: <410d1b15$0$1733$abc4f4c3@news.wanadoo.nl>
Source record: 91574

Thank you for answering my question.
The given solutions offer J-poles rather than Slim-jims, so I think it
will be better to build two tubes, to be mounted separately.

G.Beat wrote:
>
> Well your web page link is about pirate radio operations (R. J. Kojetin
> listed as of 2000),
> and this antenna design can found on a number of different web page.
> http://www.ha.cz/a_spionaz/urobsisam/radio/doc/omni-ant.htm
>
> The "Slim Jim" is an aerial (antenna) designed by G.C. Judd G2BCX and
> featured in the "Two-meter Antenna handbook"
> This book was published by Newnes Technical Book (ISBN 0 408 00402 9)
> http://www.johncath.force9.co.uk/omni%202mtr.htm
>
> http://www.qsl.net/qrp/ant/slimjim.htm
>
> In many ways, this design is a modified "J-pole" antenna design -
> which is a very popular and inexpensive antenna to build.
> http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=3481
>
> http://www.hamuniverse.com/jpole.html
>
> Dual band designs do exist - marine (160 MHz) and UHF
> http://www.n7qvc.com/amateur_radio/copper.html
>
> http://www.arrowantennas.com/j-pole.html
>
> w9gb
>
>
>
>
>

1154. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 16:43:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <Q49Pc.3516$QA5.531@nwrddc01.gnilink.net>
Source record: 91575
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Mike

The Electronic Design article is only 4 pages. I could easily E-mail it
to you.

Jerry

"Activ8" <reply2group@ndbbm.net> wrote in message
news:1s0gjpwyci1o8$.dlg@news.individual.net...
> On Sun, 01 Aug 2004 06:49:33 GMT, Jerry Martes wrote:
>
> > MMike
> >
> > I havent learned to type either.
> >
> > I wrote a short article in Electronic Design magazine in 1966 wherin I
> > outlined a simple way of predicting which combinations of series and
shunt
> > reactances would be most appropriate for matching any given impedance.
I'd
> > have to re-read it to learn what I wrote. I sure couldnt give any
advice
> > about using a Smith Chart from "the top of my head". I've been away
from
> > engineering since 1969 when I was layed off from TRW.
>
> Oh, your just a boatload of good news from the past :(The TRW here
> in this area (valve division) is moving to Asia. The state offered
> them money to stay, but it was too late. Mgmt had already issued the
> decree.
>
> > The basic thought elaborated on in the article was -- divide the
Chart
> > into 8 sections, chosen to identify what combination of reactances are
most
> > suited for producing a match. I think that anyone who worked for a
short
> > time with impedance matching would find the article unnecessary.
> > The article included some information on how a Z theta chart can be
> > usefull in analyzing how transmission line transformers effect
impedances.
> > I have forgotten everything I ever knew about Z theta Charts.
>
> So is that EDN and would they have the article online?

> >
>
> --
> Best Regards,
> Mike

1155. Re: trap / loading advice needed.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 16:44:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <xqTgXtEy3RDBFAiJ@ifwtech.co.uk>
Source record: 91576

Reg Edwards wrote:
>For ages, I have had at the back of my mind this particular problem.
>
>Input data to a program consists of overall antenna length, the
>location of the trap along the wire, and the two antenna resonant
>frequencies.
>
>Required output data are the L and C values of the trap. There's no
>interest in what the resonant frequency of the trap may be.
>
>Apparently the solution lies in solving a pair of simultaneous
>equations.
>
>But the situation is aggravated by the fact that there will be no
>solution for some values of input data because the computer will be
>asked to find the squareroot of minus one or to attempt some other
>equally impossible task.
>
>For other values of input data there will be multiple solutions for L
>and C involving their negative values.
>
>And for many solutions, impractical values of L and C will occur.
>
Some of those can be excluded from the start, if you adopt an iterative approach and seed the equations with reasonable values. It might then converge quite readily.

I believe W0JF had solved that problem, or avoided it. Wish I still had a copy of the original article and the program.

>The program user would be obliged to go through the same mental
>contortions as he would when experimenting with hardware in his
>backyard.
>
Well, at least the mess is easier to sweep up afterwards...

>There would be a great amount of work for me to produce a pair of
>simultaneous equations in a form suitable for computer implementation
>for a very few number of users.

There could be significantly more users if they had the tools to design it.

The specific advantage compared with an ordinary trap is that you aren't using the L/C circuit at its resonant frequency where the circulating currents reach their peak, so the I-squared-R losses are claimed to be

significantly lower.

>But I'll continue thinking about it.

Please do, Reg - it looks like just your kind of problem.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1156. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 17:01:08 UTC
From: Activ8 <reply2group@ndbbm.net>
Message-ID: <jc4l57910h12$.dlg@news.individual.net>
Source record: 91579
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 16:43:28 GMT, Jerry Martes wrote:

> Mike
>
> The Electronic Design article is only 4 pages. I could easily E-mail it
> to you.
>
> Jerry
>

I'd appreciate that. I'll backchannel you with my email addy. I'd suggest you obfuscate yours in the future - the posting and reply address in your news reader. The spam bots mine these groups and it's gotten quite ugly for some in the recent past.

You might alternately consider posting it to alt.binaries.schematics.electronic under an appropriately descriptive title.

--
Best Regards,
Mike

1157. Re: Icom AH-4 Placement and Really Cold Weather

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 17:02:47 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Xm9Pc.63407$8_6.19680@attbi_s04>
Source record: 91577

Mine has worked FB at -23C. I have no info on -30C etc.

A Saciuk wrote:

> Hello!
>
> I've been thinking about buying an Icom AH-4 Tuner, to run multiband
> on an end fed antenna. I was hoping to place the AH-4 as near to the
> roof as possible, as the end fed is going to run from the roof peak of
> the back of my house, to a large tree in the front yard (too many
> wires, hydro poles and accidents waiting to happen in the back).
>
> Now here is the problem... Our winters north of the 49th often reach
> temperatures of -35 celcius for weeks on end, which according to the
> literature, are beyond the AH-4's tolerance of -10 celcius.
>
> What would be the easiest solution? The attic naturally gets as cold
> as outdoors, so I can't stash the tuner in the attic, and run the wire
> out. I don't know about putting the tuner in the closet to run a
> single wire through the wall and out, as I want to get the
> transmitting wire high up, and as far away from myself as possible. I
> have an Icom 746, so I was hoping to actually use full power (100
> watts) and feel comfortable about keeping the AH-4 at a reasonable
> temperature, and yet not rearranging my DNA while I transmit.
>
> Any suggestions would be greatly appreciated
>
> 73,
> Andrew
> VE4SCK

1158. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 17:05:06 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <6p9Pc.195460$%_6.138260@attbi_s01>
Source record: 91578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Will work just fine! Put it on your car where the is some metal. The
magnet has no, none, zero, impact on the E fielf but the nearby metal does.

Mag mounts are FB.

Bob Dalton wrote:

> I'm thinking about putting a mag mount antenna on my car. But I
> have heard that they really don't work. Someone said that because of
> the magnet their isn't any capacitive coupling for the RF ground. Is
> that true? So a mag mount would work just as well if I set it on my
> picnic table? Also, does the coax attached to it as a ground? If I
> change the length of the coax, will a mag mount quit working?
>
> Thanks.

1159. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 17:11:18 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <7r8qg01fae1shaqetkqqfe9iharal4nk9s@4ax.com>
Source record: 91580

On Sat, 31 Jul 2004 21:32:31 -0400, " Uncle Peter" >

>The SStran transmitter is a damn good unit,
>and will give you up to a mile range
>if you're up to building the antenna suggested at their website.
>

Here are some more options:
http://www.ramseyelectronics.com/hk/default.asp?page=amfm

I'm using an FM25B, range is about 1/2 mile with the supplied
whip antenna. Excellent audio.

--
-fb-

1160. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 18:40:17 UTC
From: Chris <REMOVEchris1379ME@bigfoot.com>
Message-ID: <lOaPc.5480$cK.4088@newsread2.news.pas.earthlink.net>
Source record: 91581
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

Where's the antenna?

Chris
"Steveo" <moparholic@hotmail-nospam.com> wrote in message
news:20040801113640.084$B3@newsreader.com...
| "Leland C. Scott" <kc8ldo@arrl.net> wrote:
| > Not really. Consider a magnetic base of 2 inches in diameter sitting on
a
| > painted metal
| > surface with 0.010 inches of paint. Then as an approximation I looked
up
| > the dielectric constant for epoxy, 3.62, to use for the paint.
| >
| LMFAO! Look how lelnad the fuckstick ran his coax into his section
| eight apartment.
|
| http://img32.exs.cx/my.php?loc=img32&image=scan59.jpg
|
| Yea..he's an expert at this stuff. <eg>

1161. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 18:58:05 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <8teqg0do6fummdb8nfesh35h5n926q6le9@4ax.com>
Source record: 91582

On Sun, 1 Aug 2004 06:38:31 +0100, John Woodgate <jmw@jmwa.demon.contraspam.yuk> wrote:

>You agree with my explanation above, that it's not the chart that
>'fails', but that terms in the equations change significance at low
>frequencies?

Knowing the long lines Reg was associated with, being on the order of 3000 miles, at low frequencies the Smith Chart wasn't going to work when the line attenuation gave the Zo such a high capacitive reactance that the inward spiral of impedance vs line length would be too steep to permit the Chart to be useful. It isn't just the frequency.

Walt, W2DU

1162. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 19:12:23 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <410d4208$0$105$6c56adcd@news.qnet.com>
Source record: 91583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

Hello Steve:

I fell out of my chair laughing at that one. That is first call Redneck
all the way.

But I must admit I have a bunch of coaxes entering my radio room from a
sliding glass window.

But the all time great was when my ol man (Dear ol Dad) knocked a hole
in the wall with a slege hammer and length of 1 1/2 Pipe. We needed to
get the coaxes in the radio room for the Moonraker 4, and Omni Antennas.
We had rented a house for a short while while getting another house
ready to move into.

The coaxes fit in the hole just fine. A few rags to keep the cool air
and bugs out, and started to hammer the San Fernando Valley from high a
top the heigths of Tujunga.

Oh the memeories.....

Jay in the Mojave

Steveo wrote:

> "Leland C. Scott" <kc8ldo@arrl.net> wrote:
>
>>Not really. Consider a magnetic base of 2 inches in diameter sitting on a
>>painted metal
>> surface with 0.010 inches of paint. Then as an approximation I looked up
>>the dielectric constant for epoxy, 3.62, to use for the paint.
>>
>
> LMFAO! Look how lelnad the fuckstick ran his coax into his section
> eight apartment.
>
> http://img32.exs.cx/my.php?loc=img32&image=scan59.jpg
>
> Yea..he's an expert at this stuff. <eg>

1163. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 19:17:27 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <2kfqg0t1ugcf5f23a0a5jaj4oht7e1vqkj@4ax.com>
Source record: 91584

On Sun, 1 Aug 2004 05:25:13 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Hi Walt,
>
>Believe me, I DO understand and sympathise with your genuine feelings about
>the sentiment and nostalgia associated with the Smith Chart with which I
>have no criticism. It was a highly valuable, fast, sufficiently accurate and
>much-esteemed tool when nothing else was available except tedious tables and
>the slide rule.
>
>The reason I never found a use for Mr Smith's chart was an obvious one - I
>was involved with research in the spectrum from 1/20th of a cycle per second
>up to several MHz at which frequencies the chart, of which I was not
>unaware, was useless. Line lengths extended up to 3000 miles and, yes, there
>were standing waves albeit rather damped.
>
>So my education on transmission lines was self-taught and thorough. It is
>not surprising I arrived at a different set of viewpoints on line behaviour
>from that acquired by the majority of engineers, at that time, who had
>worked their simplified way downwards from the newly invented magnetron at 3
>GHz. (Indeed it is from where I initially began myself.)
>
>My present criticism is not so much of SWR meters as of the people who
>imagine they are using them. The only people I meet are on newsgroups such
>as this who are a mixture of professionals and amateurs, very often both.
>It's very difficult to distinguish one from the other. As you may have
>noticed I have classified many of them, without being specific, yet kindly
>and humorously I hope, as being old wives who tell tales.
>
>They tell tales, not only because they plagiarise each other, but because
>they have mis-educated themselves, without ever thinking about it, by taking
>the name "SWR Meter" literally. Whereas the so-called meter itself does
>nothing of the kind. There is not even a line which exists on which the SWR
>is measured. Consequently what is really going on is misunderstood. Virtual
>short and open circuits, reflected power, etc., in the way of explanations
>are just so much nonsense. Conjugate matches in practice do not exist. They
>are just interesting talking and arguing points.
>
>All that's necessary at HF is to change the name of the SWR meter to TLI
>(Transmitter Loading Indicator) and start reasoning from there. Life is
>really quite obvious and simple, easily understood by novices welcome to
>this fascinating hobby of ours.
>

>I see through the kitchen (combined computer room) window that dawn has
>broken. The bottle of Premieres Cotes de Bordeaux is 3 parts empty. And so
>to bed.
>----
>Yours, Reg, G4FGQ
>

Thanks a million, Reg, for the insightful response. I really appreciate the cordial manner in which you explained your position.

That being said, I must ask whether you have received the many emails I sent to you during the last two years? I never received a reply from any of them. I could only assume you were offended by something I had said earlier.

If you didn't receive them I sent the first when I was in London in June 2003, asking for your phone number so we could arrange to meet. With no response I sent you three more from the cruise ship we were on, one from the North Sea and two from the Baltic, and the fifth when we returned to London. The last one I sent was in May 2004, again trying to detemine if I had offended you, but alas, still no response.

As you can surmise, I'm sending this on the rraa on the chance that my private emails found the wrong address and you didn't receive them, although they were not returned. I hope there is a technical reason why I didn't hear from you, because I really did want to meet you while in England.

73, Walt

1164. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 19:37:58 UTC
From: kashe@sonic.net
Message-ID: <4ehqg050vo8gdrk93jk9i8m482cis6s8qp@4ax.com>
Source record: 91585

On Sun, 01 Aug 2004 06:27:35 -0500, mike <n0qfv@stic.net> wrote:

>Yeah really want slow. . . you ain't done slow till you done 110 Baud.

Yep, the joy of sitting home on Saturday morning doing remote
database maintenance with a Texas Instruments Silent 700 terminal with
thermal paper and and the phone stuffed into the acoustic modem cups.
Choice of low speed 10 char/sec or high speed 30 char/sec.

If it's too fast to read as it prints, it's too fast, period.

1165. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 19:43:21 UTC
From: kashe@sonic.net
Message-ID: <bthqg0p986sbbj4vcaa0b2r91rseb1ja6o@4ax.com>
Source record: 91586

On Sun, 1 Aug 2004 10:20:09 +0200, "Thierry" <to answer direct see
http://www.astrosurf.com/lombry/post.htm> wrote:

>
>"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
>news:410c48b8_1@news1.prserv.net...
>> Thierry:
>>
>> Before you get someone killed, hire some competent high iron workers.
>> Anyone who drops a section of tower because they are uninformed on tower
>> safety is going to raise the insurance rates for everyone, never mind the
>> human life you may take.
>
>Hi,
>
>I think that we know that my friend. This is not our first tower and we all
>already have do similar installations, and I even wrote a short article
>about it as well http://www.astrosurf.com/lombry/qsl-rotator-tower.htm p2-5.
>However I am personally less familiarized with such a job than my friends.
>But on the contrary I was more security oriented that most of them. But as
>there was only one director on the field, I could always go against his
>decision or we have no more time to buy the additional material. All people
>were in site and we had to erect the tower now, not tomorrow...
>That said in practice we could do the job without problem, even if not
>everybody had an helmet or gloves for example and didn't think that some
>pulley 'd break.
>
>3 people climbed on the tower : 2 most of the time and a third to check some
>detail. There was also only with people directing the work.
>One of us was specialist in aluminium work (on plane, etc), another one was
>expert in scaffolding before he retired and a third used to work on sloping
>roof and on high chimneys. We have not really high iron workers.
>
>For the gin-pole the guy who built it in assembling 2-3 tubes recognized
>immediately that his system was faulty. But is worked up to over 10m high
>without problem as long as the all system was well check and secure with
>ropes (4mm steel cable, the one use by the eletrical winch).
>
>Of course I think that in erecting any tower we learn something new each
>time.
>
>This time, 2 rollers attached to the lift system (a new one) made of steel
>broke !, we lost two other pulleys because they were made of teflon. They
>were replaced with steel ones. Hopefully we had full of spare parts up to

>mini-clamps because we already learnt lessons from previous similar
>experiences. Even the winch (a new one) didn't wind correctly and we had to
>unwind it completely and wind it up without making knots. This steel cable
>4mm think will be replaced by a new 50m roll.
>
>But the simpler the best : another time to another friend who desired to
>erect a 14m high cranking tower (from the same manufacturer) 60 cm wide (8
>years ago now) we simply assembled all the tower horizontally at ground
>level, then pulling on ropes to erect it progressively vertically. This
>method was faster and much simpler. We were 18 people, 15 at ground pulling,
>2 other holding the tower and a third in a tree with a "tire-fort" (sort of
>manual winch, cannot translate).

I suspect the tool you're talking about here is a come-along.

>This solution worked perfectly without
>error or broken part. Good to know.
>
>Thierry
>
>>
>> --
>> Crazy George
>> Remove N O and S P A M imbedded in return address
>>
>>
>

1166. Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 20:08:17 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040801160817.29796.00002244@mb-m18.aol.com>
Source record: 91587

Interesting article at
http://www.freerepublic.com/focus/news/1182979/posts?page=22
so much for my 300,000 km/s "constant" :-(

extract:
>>The theory is deceptively simple: The speed of light is not constant, as we've been taught since the early 1930s, but has been steadily slowing since the first instance of time.

If true, virtually all aspects of traditional physics are affected, including the presumed steady state of radioactive decay used to measure geologic time.

It's an intriguing story – and like many revolutions in science, it begins with observations that just don't fit currently accepted scientific dogma. <<

1167. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 20:09:56 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040801160956.002$yG@newsreader.com>
Source record: 91588
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

LOL..well in lelnads case it's called white trash technology..

Jay in the Mojave <jay123a@qnet.com> wrote:
> Hello Steve:
>
> I fell out of my chair laughing at that one. That is first call Redneck
> all the way.
>
> But I must admit I have a bunch of coaxes entering my radio room from a
> sliding glass window.
>
> But the all time great was when my ol man (Dear ol Dad) knocked a hole
> in the wall with a slege hammer and length of 1 1/2 Pipe. We needed to
> get the coaxes in the radio room for the Moonraker 4, and Omni Antennas.
> We had rented a house for a short while while getting another house
> ready to move into.
>
> The coaxes fit in the hole just fine. A few rags to keep the cool air
> and bugs out, and started to hammer the San Fernando Valley from high a
> top the heigths of Tujunga.
>
> Oh the memeories.........
>
> Jay in the Mojave
>
> Steveo wrote:
>
> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > >
> >>Not really. Consider a magnetic base of 2 inches in diameter sitting on
> >>a painted metal
> >> surface with 0.010 inches of paint. Then as an approximation I looked
> >>up the dielectric constant for epoxy, 3.62, to use for the paint.
> >>
> > >
> > > LMFAO! Look how lelnad the fuckstick ran his coax into his section
> > > eight apartment.
> > >
> > > http://img32.exs.cx/my.php?loc=img32&image=scan59.jpg
> > >
> > > Yea..he's an expert at this stuff. <eg>

1168. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 20:21:54 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <sJydnY25fe1FzZDcRVn-vg@comcast.com>
Source record: 91589
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"I ain't George either" <KennelMaster@not-here.com> wrote in message
news:GM6Pc.10551$_25.1129@fe2.texas.rr.com...
>
> "Leland C. Scott" <kc8ldo@arrl.net> wrote in message
> news:ZeGdnSRl5JUA45HcRVn-hQ@comcast.com...
> >
> > "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
> > news:jJednec7ptbk1pHcRVn-hg@comcast.com...
> > > Unless you are using a 1/4 wave VHF antenna, make sure it has a strong
> > > magnet, or magnets. I had a 5/8 wave 2m antenna on a name brand mag
> mount
> > > blow off the roof.
> >
> > MFJ?

That's what I asked.

--
Leland C. Scott
KC8LDO

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1169. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 20:22:24 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410d5104$1@news.vo.lu>
Source record: 91590

<kashe@sonic.net> wrote in message
news:bthqg0p986sbbj4vcaa0b2r91rseb1ja6o@4ax.com...
> On Sun, 1 Aug 2004 10:20:09 +0200, "Thierry" <to answer direct see
> http://www.astrosurf.com/lombry/post.htm> wrote:
>...
> >level, then pulling on ropes to erect it progressively vertically. This
> >method was faster and much simpler. We were 18 people, 15 at ground
pulling,
> >2 other holding the tower and a third in a tree with a "tire-fort" (sort
of
> >manual winch, cannot translate).
>
> I suspect the tool you're talking about here is a come-along.

Right, it's a comalong. Thanks for the translation !
The only problem of this method vs. the gin pole is that it requires many
more people to do the job (15+ vs. 3-4), and its is never easy to ask 15-18
people to be free at the same time, even for a 1 hr job, even asking in a
club.

Thierry

>
> >This solution worked perfectly without
> >error or broken part. Good to know.
> >
> >Thierry
> >
> >>
> >> --
> >> Crazy George
> >> Remove N O and S P A M imbedded in return address
> >>
> >>
> >
>

1170. Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 20:28:09 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410d525e@news.vo.lu>
Source record: 91591

Hi

One of my friend come home with a fine question.
He is in the process to buy a new beam and found Steppir quite interesting due to its auto adjusting without moving the elements (all tuning per band is made inside the tubes in winding up a copper strap).

Question to Steppir users as I am not sure of the answer:

Is the separation between parasitic elements important as, in all cases, there is an adjustment on each band ?
We ask for the question because we would like to move the central element of a 3-ele steppir multiband beam of about 50 cm to the right /left in order to be able to take the antenna down to the ground (around the pylon). Up to now the central element is in the passage. A way should be to me it slightly to the L or R...

Is it possible or not without changing the performance (mainly SWR) of the Steppir ?

Thierry, ON4SKY
http://www.astrosurf.com/lombry

1171. Yaesu Rotor Control Box Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 21:08:36 UTC
From: Billy <billy@cmaaccess.com>
Message-ID: <410d64d4$0$10704$2c56edd9@news.cablerocket.com>
Source record: 91592

Will a Yaesu g1000sdx control box work with a Yaesu 800 rotor? I have a 800sa rotor up now, and picked up the 1000sdx control box without the rotor. I would like to have the memories & speed control on the 1000sdx if it will work. If not, will the 800sdx box work and does anyone know the difference in the wiring of the 800sa control box and the 800sdxor 1000sdx? Any information would be greatly appreciated. Please email direct to billy(at)cmaaccess.com. Of course replace (at) with @.

Thanks & 73
Billy.......WR5X

1172. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 21:29:01 UTC
From: Bill <qzd@excite.com>
Message-ID: <egdPc.2528$Jo1.587@lakeread01>
Source record: 91593

"tire-fort" = Tirfor Grip Hoist
I have one,TU 16, works great.
Bill

Thierry wrote:
> <kashe@sonic.net> wrote in message
> news:bthqg0p986sbbj4vcaa0b2r91rseb1ja6o@4ax.com...
>
>>On Sun, 1 Aug 2004 10:20:09 +0200, "Thierry" <to answer direct see
>>http://www.astrosurf.com/lombry/post.htm> wrote:
>>...
>>
>>>level, then pulling on ropes to erect it progressively vertically. This
>>>method was faster and much simpler. We were 18 people, 15 at ground
>
> pulling,
>
>>>2 other holding the tower and a third in a tree with a "tire-fort" (sort
>
> of
>
>>>manual winch, cannot translate).
>>
>>I suspect the tool you're talking about here is a come-along.
>
>
> Right, it's a comalong. Thanks for the translation !
> The only problem of this method vs. the gin pole is that it requires many
> more people to do the job (15+ vs. 3-4), and its is never easy to ask 15-18
> people to be free at the same time, even for a 1 hr job, even asking in a
> club.
>
> Thierry
>
>
>>>This solution worked perfectly without
>>>error or broken part. Good to know.
>>>
>>>Thierry
>>>
>>>
>>>>--
>>>>Crazy George
>>>>Remove N O and S P A M imbedded in return address

>>>>
>>>>
>>>
>
>

1173. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 21:33:25 UTC
From: Green Hornet <GH@comic.net>
Message-ID: <FkdPc.3006$wz.253@fed1read01>
Source record: 91594

Have you read "The Tower"
http://www.speroni.com/Tower.html

--

El Hornet Verde

1174. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 21:33:45 UTC
From: I ain't George either <KennelMaster@not-here.com>
Message-ID: <ZkdPc.26595$Gk4.11078@fe1.texas.rr.com>
Source record: 91595
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

"Steveo" <moparholic@hotmail-nospam.com> wrote in message
news:20040801113640.084$B3@newsreader.com...
> "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > Not really. Consider a magnetic base of 2 inches in diameter sitting on
a
> > painted metal
> > surface with 0.010 inches of paint. Then as an approximation I looked
up
> > the dielectric constant for epoxy, 3.62, to use for the paint.
> >
> LMFAO! Look how lelnad the fuckstick ran his coax into his section
> eight apartment.
>
> http://img32.exs.cx/my.php?loc=img32&image=scan59.jpg
>
> Yea..he's an expert at this stuff. <eg>

Looks like Spiderman tried to help him weatherproof the entrance!

1175. Re: Capacitor loaded vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 21:59:00 UTC
From: jgboyles@aol.com
Message-ID: <20040801175900.10926.00002818@mb-m02.aol.com>
Source record: 91596

>I am planning to add two motor driven variable capacitors to the
>feedpoint, one in the vertical and one in the counterpoise to resonate the
>antenna on the bands between 40 and 10m.

I don't think you can do all bands 40-10m with a fixed inductor center loading, and a variable series capacitor. Most of the shortened center loaded designs I have seen add inductive loading until the antenna looks inductive at the frequency of interest. Then they use a series capacitor to tune to resonance. Even then you may not have a 1:1 50 ohm swr. This means, in order to change bands, you will need to vary your inductor as well as the motor driven capacitors.
There may be a magic value of inductor that will get you close on all bands, using just a variable cap. On 7 mhz and 14 mhz, or 14 mhz and 28 mhz the vastly different input impedances of the antenna seems to rule out using just a single capacitor for matching.
73 Gary N4AST

1176. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 22:20:43 UTC
From: Rick Karlquist N6RK <richard@karlquist.removethis.com>
Message-ID: <_0ePc.211416$JR4.119957@attbi_s54>
Source record: 91597

Can you just move the mast to boom clamp 50 cm
instead of relocating the element? Moving the element
50 cm would degrade F/B ratio considerably. You
might be able to reprogram the control box to fix this, but that would
be a lot of work and you would have to know exactly
what you were doing.

Rick N6RK

"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:410d525e@news.vo.lu...
> Hi
>
> One of my friend come home with a fine question.
> He is in the process to buy a new beam and found Steppir quite interesting
> due to its auto adjusting without moving the elements (all tuning per band
> is made inside the tubes in winding up a copper strap).
>
> Question to Steppir users as I am not sure of the answer:
>
> Is the separation between parasitic elements important as, in all cases,
> there is an adjustment on each band ?
> We ask for the question because we would like to move the central element
of
> a 3-ele steppir multiband beam of about 50 cm to the right /left in order
to
> be able to take the antenna down to the ground (around the pylon). Up to
now
> the central element is in the passage. A way should be to me it slightly
to
> the L or R...
>
> Is it possible or not without changing the performance (mainly SWR) of the
> Steppir ?
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>

1177. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 22:42:36 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <YjePc.2530$Jo1.1643@lakeread01>
Source record: 91598

"funkbastler" <funkbastler@eudoramail.com> wrote in message
news:7r8qg01fae1shaqetkqqfe9iharal4nk9s@4ax.com...
> On Sat, 31 Jul 2004 21:32:31 -0400, " Uncle Peter" >
>
> >The SStran transmitter is a damn good unit,
> >and will give you up to a mile range
> >if you're up to building the antenna suggested at their website.
> >
>
> Here are some more options:
> http://www.ramseyelectronics.com/hk/default.asp?page=amfm
>
> I'm using an FM25B, range is about 1/2 mile with the supplied
> whip antenna. Excellent audio.
>
> --
> -fb-
>

!/2 mile range on FM is probably exceeding FCC part 15 regulations,
however.

Pete

1178. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 22:50:18 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410d73af@news.vo.lu>
Source record: 91599

"Green Hornet" <GH@comic.net> wrote in message
news:FkdPc.3006$wz.253@fed1read01...
> Have you read "The Tower"
> http://www.speroni.com/Tower.html
>

One more human mistake... an incredible one indeed !

It reminds me Tex Avery's Coyote who could not do better ;-)

Thierry

> --
>
> El Hornet Verde
>
>

1179. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 22:51:02 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410d73da$1@news.vo.lu>
Source record: 91600

"Rick Karlquist N6RK" <richard@karlquist.removethis.com> wrote in message
news:_0ePc.211416$JR4.119957@attbi_s54...
> Can you just move the mast to boom clamp 50 cm
> instead of relocating the element? Moving the element
> 50 cm would degrade F/B ratio considerably. You
> might be able to reprogram the control box to fix this, but that would
> be a lot of work and you would have to know exactly
> what you were doing.

I will check this... stay tuend ;-)

73
Thierry

>
> Rick N6RK
>
> "Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
> wrote in message news:410d525e@news.vo.lu...
> > Hi
> >
> > One of my friend come home with a fine question.
> > He is in the process to buy a new beam and found Steppir quite
interesting
> > due to its auto adjusting without moving the elements (all tuning per
band
> > is made inside the tubes in winding up a copper strap).
> >
> > Question to Steppir users as I am not sure of the answer:
> >
> > Is the separation between parasitic elements important as, in all cases,
> > there is an adjustment on each band ?
> > We ask for the question because we would like to move the central
element
> of
> > a 3-ele steppir multiband beam of about 50 cm to the right /left in
order
> to
> > be able to take the antenna down to the ground (around the pylon). Up to
> now
> > the central element is in the passage. A way should be to me it slightly
> to
> > the L or R...
> >
> > Is it possible or not without changing the performance (mainly SWR) of

the
> > Steppir ?
> >
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry
> >
> >
>
>

1180. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 23:29:19 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <j1fPc.6372$Jp6.229@newsread3.news.atl.earthlink.net>
Source record: 91601

"John D" <jawnd393@yahoo.com> wrote in message
news:5XvOc.82$UN2.3@nwrddc02.gnilink.net...
> I'm a new ham and this will be used for my first antenna.
>
> I have 97 ft of twinlead that I think might be 75 ohm but there is no
> identifying label on it.
> I have searched the web and can't find any information on 75 ohm twinlead.
> Can anyone identify this wire from these dimensions?
>
> Conductors about 28 AWG. (7 strand of #34 or 35) .
> Separated about 1/4 inch apart.
> Width overall .361" x .125 or (almost 3/8)"
> Thickness overall 1/8"
> Web thickness .035"
> Each wire has some white insulation around it and the outer twinlead
shaped
> insulation is black
>
> This wire is very light and I want to use it to feed a HF dipole with no
> center support.
> My maximum power is 200 watts.
> John
>
>
Sounds like what was called low loss UHF twinlead. 300 ohms.

Dan/W4NTI

1181. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 23:29:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410d7e1e_6@corp.newsgroups.com>
Source record: 91602
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Jerry Martes wrote:
> I think you are wrong about Smith Charts being limited to use at low
> frequencies.

Probably what Reg is talking about is that the 1.0 normalized value
in the center of the Smith Chart lies on the purely resistive horizontal
line. Thus Z0 = 1.0 + j0 (normalized). Reg is probably saying that the
Z0 = 1.0 + j0 assumption is not valid at low frequencies for the average
transmission line.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1182. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 23:45:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410d81ce_6@corp.newsgroups.com>
Source record: 91604
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Reg Edwards wrote:
> The advantage of equations over graphs is that they are nearer to the
> quantitative than they are to the qualitative world.

Yes, and that is one of their disadvantages. An engineer can arrive
at a perfect quantitative solution without an iota of understanding
of the real-world qualitative physical processes. I personally am much
more interested in a conceptual understanding of the process than I
am in the accuracy of the abstract numbers which are the solution.
Graphs are a visual aid to conceptual understanding that equations
simply cannot match (even with a MENSA level IQ).
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1183. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 23:47:56 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <MifPc.8321$UN2.5865@nwrddc02.gnilink.net>
Source record: 91603
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Cecil

I can se a couple problems. Both are mine. First, I should have written
that someone is wrong about Smith Charts being *FROM* use at low
frequencies. Second, there was no value in my posting something that was
already covered by others.
I sure agree with anyone who points out that Smith Charts shouldnt be used
where they arent designed to work. I like smith Charts and thats probably a
result of my poor academic education.

Jerry

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:410d7e1e_6@corp.newsgroups.com...
> Jerry Martes wrote:
> > I think you are wrong about Smith Charts being limited to use at low
> > frequencies.
>
> Probably what Reg is talking about is that the 1.0 normalized value
> in the center of the Smith Chart lies on the purely resistive horizontal
> line. Thus Z0 = 1.0 + j0 (normalized). Reg is probably saying that the
> Z0 = 1.0 + j0 assumption is not valid at low frequencies for the average
> transmission line.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1184. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 23:51:04 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <760rg0htopc09fg9m5jvdp7nbofgu7mrfs@4ax.com>
Source record: 91605

On Sun, 01 Aug 2004 06:27:35 -0500, mike <n0qfv@stic.net> wrote:

>Ed Price wrote:
>> "Bill Turner" <noway@nohow.com> wrote in message
>> news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
>>
>>>On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt <spamfree@myhome>
>>>wrote:
>>>
>>>
>>>>to get to our 1200
>>>>baud modems...
>>>
>>>_____
>>>
>>>Newbie. REAL OT's had 300 baud modems. :-)
>>>
>>>--
>>>Bill, W6WRT
>>>QSLs via LoTW
>>>
>>
>>
>> Acoustic!!!!
>>
>> Ed
>> wb6wsn
>>
>Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>
>QFV

Hah. First computer I worked on (technically, more of a router, but
you get the idea) used vacuum tubes (technically, gas tubes (actually,
glorified neon bulbs), but you get the idea) & interfaced to the
outside world at the blazing speed of 45.5 baud.

H.

1185. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-01 23:55:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410d8414_6@corp.newsgroups.com>
Source record: 91606

mike wrote:
> Yeah really want slow. . . you ain't done slow till you done 110 Baud.

How fast was an ASR-28?

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1186. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 00:11:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410d87d0$1_6@corp.newsgroups.com>
Source record: 91607

Yuri Blanarovich wrote:

> The theory is deceptively simple: The speed of light is not constant, as
> we've been taught since the early 1930s, but has been steadily slowing since
> the first instance of time.

Miles are getting longer and seconds are getting shorter as the universe ages.
Since the speed of light is in, for instance, miles/second, naturally the speed
of light has to change as the universe ages. It's a no-brainer.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1187. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 00:29:36 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <fd2rg098hkohtcao4lqh845dl49hcppdtv@4ax.com>
Source record: 91608
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 18:45:33 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Reg Edwards wrote:
>> The advantage of equations over graphs is that they are nearer to the
>> quantitative than they are to the qualitative world.
>
>Yes, and that is one of their disadvantages. An engineer can arrive
>at a perfect quantitative solution without an iota of understanding
>of the real-world qualitative physical processes. I personally am much
>more interested in a conceptual understanding of the process than I
>am in the accuracy of the abstract numbers which are the solution.
>Graphs are a visual aid to conceptual understanding that equations
>simply cannot match (even with a MENSA level IQ).

Richard Feynman, who had a decent IQ himself, said that he couldn't
approach anything analytically unless he managed to get an intuitive
feel for the thing first.

The good thing about "gut feel", from an engineering standpoint, is
that it's a good sanity check on the equations. My engineers sometimes
present me with an analytical result that just feels wrong to me, and
it usually - but not always - is. Graphs are also wonderful for
feeling how things work, just as analog meters sometimes are so much
more useful than digital ones.

John

1188. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 00:32:25 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <ip2rg0p2959kuirp5ahvilttja4pttnbfg@4ax.com>
Source record: 91609
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 18:29:49 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Jerry Martes wrote:
>> I think you are wrong about Smith Charts being limited to use at low
>> frequencies.
>
>Probably what Reg is talking about is that the 1.0 normalized value
>in the center of the Smith Chart lies on the purely resistive horizontal
>line. Thus Z0 = 1.0 + j0 (normalized). Reg is probably saying that the
>Z0 = 1.0 + j0 assumption is not valid at low frequencies for the average
>transmission line.

Smith charts can be used to solve purely lumped-element problems, too.

I wonder if Smith charts have ever been used for analyzing 50/60 Hz
power grids. Their losses are fairly low.

John

1189. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 00:43:35 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <su2rg05fieh1tpnahma0en650j77284bi9@4ax.com>
Source record: 91610
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 17:29:36 -0700, John Larkin
<jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:

[snip]
>
>
>Richard Feynman, who had a decent IQ himself, said that he couldn't
>approach anything analytically unless he managed to get an intuitive
>feel for the thing first.
>
[snip]
>
>John

I'm like that... if I can't get my hands around something, I can't
understand it. I had a helluva time with atomic physics ;-)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1190. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 00:48:01 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <cn3rg0purfdof9jeuoh2pu3b89k6if4ono@4ax.com>
Source record: 91611
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 17:32:25 -0700, John Larkin
<jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:

[snip]
>Smith charts can be used to solve purely lumped-element problems, too.
>
>I wonder if Smith charts have ever been used for analyzing 50/60 Hz
>power grids. Their losses are fairly low.
>
>John

I wouldn't be surprised... I've been told that they locate power line
faults using a reflectometer.

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1191. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 01:09:58 UTC
From: HUMBUG <humbug@bit.bucket>
Message-ID: <6sg0u1-0d.ln1@deep.bit.bucket>
Source record: 91612

On Sun, 01 Aug 2004 09:57:48 -0700, Bill Turner <noway@nohow.com> Wrote :

<snip>

> motorized Etch-A-Sketch. Ahhhhhh... those were the days.

A MOTORIZED Etch-a-Sketch ????? How the hell did you get your hands on
one of those - rare as rocking horse shit and E X P E N S I V E

--

Humbug

1192. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 01:16:09 UTC
From: "David G. Nagel" <nagel@core.com>
Message-ID: <10gr5f4ppe21a63@corp.supernews.com>
Source record: 91613

Thierry wrote:
> "Green Hornet" <GH@comic.net> wrote in message
> news:FkdPc.3006$wz.253@fed1read01...
>
>>Have you read "The Tower"
>>http://www.speroni.com/Tower.html
>>
>
>
> One more human mistake... an incredible one indeed !
>
> It reminds me Tex Avery's Coyote who could not do better ;-)
>
> Thierry
>
>
>>--
>>
>>El Hornet Verde
>>
>>
>
>
>
I beleive that the "Mythbusters" TV show demonstrated that this could
not happen.

Dave WD9BDZ

1193. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 01:29:10 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <ML6dnc5i6dVBBZDcRVn-oQ@comcast.com>
Source record: 91614
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
news:t3ipg0dqf0akrehj30pbdb8toekqq6r4kq@4ax.com...
> On Sun, 1 Aug 2004 01:23:40 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
> wrote in <ybOdnYWVusnM45HcRVn-qQ@comcast.com>:
>
> >
> >"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
> >news:uvbog0poc1ireh2pn3326go70jiaa6hnsq@4ax.com...
> >> As for those who think a mag-mount works because of capacitive
> >> coupling to the mounting surface, I would suggest you actually try to
> >> measure this capacitance -- you will find that it's not nearly enough
> >> to make an effective counterpoise connection unless your frequencies
> >> are considerably higher than 27 MHz.
> >
> >Not really. Consider a magnetic base of 2 inches in diameter sitting on a
> >painted metal
> > surface with 0.010 inches of paint. Then as an approximation I looked up
> >the dielectric constant for epoxy, 3.62, to use for the paint.
> >
> >Cpf = 0.225 * Er * A / T
> >
> >Where Cpf is the capacitance in pf
> >Er is the dielectric constant
> >A is area of one plate of the capacitor
> >T is the distance between the two plates
> >
> >All dimension in inches.
> >
> >The above example works out to C = 255.88pf
> >
> >The reactance of 256pf at 27MHz is 23.03 ohms. If the paint dielectric is
> >higher, paint thinner, or the antenna base larger in diameter, then the
> >reactance would be even lower. Remember this is reactive, not resistance.
By
> >adjusting the antenna a bit you can compensate for this.
>
>
> Reality has a way of introducing unforseen factors into the equation,
> such as the increased distance and air gaps between the plates caused
> by the non-scratch surface of the base (which sets the dielectric
> constant closer to 1), the paint/primer/wax resistive and dielectric
> properties at RF frequencies (which, for many substances, is radically
> different than when measured at the frequencies used to determine the

> referenced constants), the ESR due to poor RF conductivity of steel (a
> ferromagnetic material) when saturated by a magnetic field at the
> point of contact, etc, etc. And don't forget that this capacitive
> reactance and ESR must be added to the ground impedance of the vehicle
> at the point of contact, which, as we all know, isn't exactly ideal.
>
> Regardless, my suggestion was to measure it, not calculate it.

I did just for grins and giggles Frank. On my old 1/4 wave 6m mag mount, I used on my old Dodge minivan, I measured 490pf. The base was 4.75 inches in diameter. The base was placed on a steel sheet using 3 sheets of notebook paper. Notebook paper is around 0.003 inches thick, so that gives me the 0.010 inch spacing. Plus this mount also used a thin sheet of rubber over the foil making the spacing a bit higher, thus you would expect the capacitance to be down a bit from the calculated value. So the value I measured is about what I expected. It is important that the foil be intact on the bottom. If missing then the measured value will be much lower.
--
Leland C. Scott
KC8LDO

Wireless Network
Mobile computing
on the go brought
to you by Micro$oft

1194. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 01:51:15 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <3t6rg0dv8kfg00446ghhsl35k7gpjd2ief@4ax.com>
Source record: 91615
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

```
On Sun, 1 Aug 2004 21:29:10 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote in <ML6dnc5i6dVBBZDcRVn-oQ@comcast.com>:

>
>"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
>news:t3ipg0dqf0akrehj30pbdb8toekqq6r4kq@4ax.com...
>> On Sun, 1 Aug 2004 01:23:40 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
>> wrote in <ybOdnYWVusnM45HcRVn-qQ@comcast.com>:
>>
>> >
>> >"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
>> >news:uvbog0poc1ireh2pn3326go70jiaa6hnsq@4ax.com...
>> >> As for those who think a mag-mount works because of capacitive
>> >> coupling to the mounting surface, I would suggest you actually try to
>> >> measure this capacitance -- you will find that it's not nearly enough
>> >> to make an effective counterpoise connection unless your frequencies
>> >> are considerably higher than 27 MHz.
>> >
>> >Not really. Consider a magnetic base of 2 inches in diameter sitting on a
>> >painted metal
>> > surface with 0.010 inches of paint. Then as an approximation I looked up
>> >the dielectric constant for epoxy, 3.62, to use for the paint.
>> >
>> >Cpf = 0.225 * Er * A / T
>> >
>> >Where Cpf is the capacitance in pf
>> >Er is the dielectric constant
>> >A is area of one plate of the capacitor
>> >T is the distance between the two plates
>> >
>> >All dimension in inches.
>> >
>> >The above example works out to C = 255.88pf
>> >
>> >The reactance of 256pf at 27MHz is 23.03 ohms. If the paint dielectric is
>> >higher, paint thinner, or the antenna base larger in diameter, then the
>> >reactance would be even lower. Remember this is reactive, not resistance.
>By
>> >adjusting the antenna a bit you can compensate for this.
>>
>>
>> Reality has a way of introducing unforseen factors into the equation,
>> such as the increased distance and air gaps between the plates caused
```

>> by the non-scratch surface of the base (which sets the dielectric
>> constant closer to 1), the paint/primer/wax resistive and dielectric
>> properties at RF frequencies (which, for many substances, is radically
>> different than when measured at the frequencies used to determine the
>> referenced constants), the ESR due to poor RF conductivity of steel (a
>> ferromagnetic material) when saturated by a magnetic field at the
>> point of contact, etc, etc. And don't forget that this capacitive
>> reactance and ESR must be added to the ground impedance of the vehicle
>> at the point of contact, which, as we all know, isn't exactly ideal.
>>
>> Regardless, my suggestion was to measure it, not calculate it.
>
>I did just for grins and giggles Frank. On my old 1/4 wave 6m mag mount, I
>used on my old Dodge minivan, I measured 490pf.

I suspect that you measured capacitance directly with either a
capacitance bridge or a DMM. Those won't work because they don't use
RF frequencies. I suggested the use of an impedance bridge and
explained the reasons why the frequency was important. As I said
before, if you measure it as I described, the results will be
significantly lower than your measured 490 pF.

> The base was 4.75 inches in
>diameter. The base was placed on a steel sheet using 3 sheets of notebook
>paper. Notebook paper is around 0.003 inches thick, so that gives me the
>0.010 inch spacing.

Just for the sake of discussion, how does the dielectric constant of
notebook paper compare to that of epoxy paint?

> Plus this mount also used a thin sheet of rubber over
>the foil making the spacing a bit higher, thus you would expect the
>capacitance to be down a bit from the calculated value. So the value I
>measured is about what I expected. It is important that the foil be intact
>on the bottom. If missing then the measured value will be much lower.

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1195. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 02:01:31 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <nf7rg0h3g9esncbs11b82t13ilnp35gsnv@4ax.com>
Source record: 91616

On Sun, 1 Aug 2004 18:42:36 -0400, " Uncle Peter"
>
>!/2 mile range on FM is probably exceeding FCC part 15 regulations,
>however.
>

Yes - but way out here in the sticks, who's gonna know?
(answer: nobody) If I lived in a civilized area, it would be
different.

For the serious bootleger, Ramsey also has a couple of amplifier
kits.

--
-fb-

1196. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 02:18:36 UTC
From: John Larkin <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com>
Message-ID: <gb8rg0pfsfj3hst925pmo0fmts2u63oe50@4ax.com>
Source record: 91617
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 17:43:35 -0700, Jim Thompson
<thegreatone@example.com> wrote:

>On Sun, 01 Aug 2004 17:29:36 -0700, John Larkin
><jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:
>
>[snip]
>>
>>
>>Richard Feynman, who had a decent IQ himself, said that he couldn't
>>approach anything analytically unless he managed to get an intuitive
>>feel for the thing first.
>>
>[snip]
>>
>>John
>
>I'm like that... if I can't get my hands around something, I can't
>understand it. I had a helluva time with atomic physics ;-)
>
> ...Jim Thompson

Me too. I think that brains are fundamentally analog computers. I mean, when you shoot a rifle or hit a baseball, all sorts of complex adjustments have to be made for the situation, and they're not done numerically. I've acquired sort of this "analog" feel for electronics that gets me pretty close almost without thinking, close enough to be suspicious of calculations that aren't right. I can usually hit a component value or whatever to within 10% just standing up, which impresses/annoys the youngsters who, frankly, are so impressed by my instant numerical results that they accept them without checking... good thing! This analog instinct is a good complement to the math. It saves a lot of time, too, when you just know something will/can't work before you go to the trouble to prove it.

It must be amazing to be a Fermi or a Feynman who have this sort of intuition, but at astronomically higher levels. Fermi would glance at complex differential equations and just scribble the solutions on a blackboard, and his co-workers would spend days confirming his results.

John

1197. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 02:29:25 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <aGhPc.21900$fm2.14048@lakeread02>
Source record: 91618

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040801160817.29796.00002244@mb-m18.aol.com...
> Interesting article at
> http://www.freerepublic.com/focus/news/1182979/posts?page=22
> so much for my 300,000 km/s "constant" :-(
>
> extract:
> >>The theory is deceptively simple: The speed of light is not constant, as
> we've been taught since the early 1930s, but has been steadily slowing
since
> the first instance of time.
>
> If true, virtually all aspects of traditional physics are affected,
including
> the presumed steady state of radioactive decay used to measure geologic
time.
>
> It's an intriguing story - and like many revolutions in science, it begins
> with observations that just don't fit currently accepted scientific dogma.
<<
>

Yuri, the only effect on anything I can imagine is "so what"? Radioactive decay is a pretty gross estimation. Likewise if the universe is shrinking, or expanding...so what? The sun is burning out too. The earth is cooling. Maybe these things explain the EH antenna.

Jack

1198. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 03:00:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410daf72$1_7@corp.newsgroups.com>
Source record: 91619

Yuri Blanarovich wrote:
> If true, virtually all aspects of traditional physics are affected, including
> the presumed steady state of radioactive decay used to measure geologic time.

Yuri, did you know there is a drift between radioactive decay and the rings
of the Bristlecone Pine that increases with time passed? IMO, that drift is
the effect of seconds getting shorter as the universe ages. Proof is that I
once could run 100 yards in 12 seconds. Now, since seconds are shorter, it
takes me twice as many seconds to cover 100 yards. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1199. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 04:48:18 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <3YGdnXvRt7gaWpDcRVn-iQ@comcast.com>
Source record: 91620
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
news:3t6rg0dv8kfg00446ghhsl35k7gpjd2ief@4ax.com...
> On Sun, 1 Aug 2004 21:29:10 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
> wrote in <ML6dnc5i6dVBBZDcRVn-oQ@comcast.com>:
>
> >
> >"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
> >news:t3ipg0dqf0akrehj30pbdb8toekqq6r4kq@4ax.com...
> >> On Sun, 1 Aug 2004 01:23:40 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
> >> wrote in <ybOdnYWVusnM45HcRVn-qQ@comcast.com>:
> >>
> >> >
> >> >"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
> >> >news:uvbog0poc1ireh2pn3326go70jiaa6hnsq@4ax.com...
> >> >> As for those who think a mag-mount works because of capacitive
> >> >> coupling to the mounting surface, I would suggest you actually try
to
> >> >> measure this capacitance -- you will find that it's not nearly
enough
> >> >> to make an effective counterpoise connection unless your frequencies
> >> >> are considerably higher than 27 MHz.
> >> >
> >> >Not really. Consider a magnetic base of 2 inches in diameter sitting
on a
> >> >painted metal
> >> > surface with 0.010 inches of paint. Then as an approximation I looked
up
> >> >the dielectric constant for epoxy, 3.62, to use for the paint.
> >> >
> >> >Cpf = 0.225 * Er * A / T
> >> >
> >> >Where Cpf is the capacitance in pf
> >> >Er is the dielectric constant
> >> >A is area of one plate of the capacitor
> >> >T is the distance between the two plates
> >> >
> >> >All dimension in inches.
> >> >
> >> >The above example works out to C = 255.88pf
> >> >
> >> >The reactance of 256pf at 27MHz is 23.03 ohms. If the paint dielectric
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> >> >higher, paint thinner, or the antenna base larger in diameter, then

the
> >> >reactance would be even lower. Remember this is reactive, not
resistance.
> >By
> >> >adjusting the antenna a bit you can compensate for this.
> >>
> >>
> >> Reality has a way of introducing unforseen factors into the equation,
> >> such as the increased distance and air gaps between the plates caused
> >> by the non-scratch surface of the base (which sets the dielectric
> >> constant closer to 1), the paint/primer/wax resistive and dielectric
> >> properties at RF frequencies (which, for many substances, is radically
> >> different than when measured at the frequencies used to determine the
> >> referenced constants), the ESR due to poor RF conductivity of steel (a
> >> ferromagnetic material) when saturated by a magnetic field at the
> >> point of contact, etc, etc. And don't forget that this capacitive
> >> reactance and ESR must be added to the ground impedance of the vehicle
> >> at the point of contact, which, as we all know, isn't exactly ideal.
> >>
> >> Regardless, my suggestion was to measure it, not calculate it.
> >
> >I did just for grins and giggles Frank. On my old 1/4 wave 6m mag mount,
I
> >used on my old Dodge minivan, I measured 490pf.
>
>
> I suspect that you measured capacitance directly with either a
> capacitance bridge or a DMM.

I did.

> Those won't work because they don't use
> RF frequencies.

They work just fine. I use them all the time, on the job and else where.

> I suggested the use of an impedance bridge and
> explained the reasons why the frequency was important.

For checking capacitance in general the answer is no, unless the dielectric shows extreme variations verses frequency and has a high loss tangent. For many materials this variation is rather small, and car paint doesn't dielectric heat much, so the loss tangent is low. About the ESR, equivalent series resistance, which is composed of mainly skin effect on the plates and losses in the dielectric, this appears in series with the capacitance and simply adds to the resistive feed point impedance of the antenna. The feed point impedance of a typical 1/4 wave ground plane with the radials at 90 degrees to the vertical element is around 30 to 40 ohms, so a bit of extra resistance makes the match look better at the expense of a lower over all antenna efficiency. Capacitive coupling to the body of the car is required, if there is no direct connection, to mirror the 1/4 wave element, thus producing the required 1/2 wave element needed for a resonate antenna.

Losses in the car body material are a completely separate issue and has nothing to do with how the coax gets coupled to the car body.

Now if you wanted to measure inductance I would say yes because you have capacitance between turns that effectively reduces the inductance and since the capacitance electricaly apperas in series with it. The same applies to measuring coil Q, and that is because of skin effect and proximity effect.

> As I said
> before, if you measure it as I described, the results will be
> significantly lower than your measured 490 pF.

Measurements are fine, but you also have to know when your equipment is lying. Poor application of test equipment, failure to understand the limitations of the equipment etc can lead one down the preverbal garden path with no warning. I get a kick out of new hires when they ask me why the waveforms they see don't look right on the scope, meter measurements don't look right etc. Then I get to show them all the wonderful ways test gear can screw up and never give you a hint what they're measuring is garbage but yet there is nothing wrong with the instruments they are using. One of my favorites is flipping the leads on a digital meter and watch the reading change 20 percent or more. Most digital meters don't use true differential inputs so the ground side of the meter is at potential and also allows noise in to the meter electronics. The ones that do have much less of a problem like the above. I could go on about what happens to scopes connected to high frequency signals with funny waveforms, high-pots that are not properly ground referenced, hall-effect current sensors etc.

They way to guard against this is to use your head. If the measurement says one thing and a quick calculation, particular if its a simple one, says you should have something significantly different you really need to consider you have a measurement problem of some kind. Nobody would have bothered to produce all the wonderful formulas, equations, and stuff your head with theory if it didn't work. I've seen to many people get hung up wasting time over a bad measurement, and didn't trust their calculations enough to question what they were seeing. It won't be the first time I went to help somebody and ended up taking the scope probe and throwing it in the trash. The look on their face when what they calculated matches the scope with a new functioning probe is priceless.

--
Leland C. Scott
KC8LDO

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1200. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 05:07:57 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <9et6hsAtwcDBFwhK@jmwa.demon.co.uk>
Source record: 91471
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Cecil Moore <w5dxp@hotmail.com>
wrote (in <410d7e1e_6@corp.newsgroups.com>) about 'S - Y Parameter
conversion with Smith Chart', on Sun, 1 Aug 2004:
>Jerry Martes wrote:
>> I think you are wrong about Smith Charts being limited to use at low
>> frequencies.
>
>Probably what Reg is talking about is that the 1.0 normalized value
>in the center of the Smith Chart lies on the purely resistive horizontal
>line. Thus Z0 = 1.0 + j0 (normalized). Reg is probably saying that the
>Z0 = 1.0 + j0 assumption is not valid at low frequencies for the average
>transmission line.

Cigar, I think. The imaginary term isn't zero, and in fact is dominant,
at low frequencies, and this applies for ANY transmission line that
doesn't have its inductance artificially increased, because:

Zo^2 = (R + jwL)/(G + jwC)

and at low frequencies jwL and G are negligible.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1201. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 05:46:17 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <CykPc.28856$mg6.16129@fed1read02>
Source record: 91472

"funkbastler" <funkbastler@eudoramail.com> wrote in message
news:nf7rg0h3g9esncbs11b82t13ilnp35gsnv@4ax.com...
> On Sun, 1 Aug 2004 18:42:36 -0400, " Uncle Peter"
> >
> >!/2 mile range on FM is probably exceeding FCC part 15 regulations,
> >however.
> >
>
> Yes - but way out here in the sticks, who's gonna know?
> (answer: nobody) If I lived in a civilized area, it would be
> different.
>
> For the serious bootleger, Ramsey also has a couple of amplifier
> kits.
>
> --
> -fb-
>

And if you were civilized, you wouldn't be a bootlegger.

Ed
wb6wsn

1202. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 05:54:17 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <7GkPc.28905$mg6.15062@fed1read02>
Source record: 91473

"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:ps5Pc.4920$cK.4392@newsread2.news.pas.earthlink.net...
>
> "mike" <n0qfv@stic.net> wrote in message
> news:410cd3a2$0$74192$39cecf19@news.twtelecom.net...
> > Ed Price wrote:
> > > "Bill Turner" <noway@nohow.com> wrote in message
> > > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> > >
> > >>On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt
<spamfree@myhome>
> > >>wrote:
> > >>
> > >>
> > >>>to get to our 1200
> > >>>baud modems...
> > >>
> > >>____
> > >>
> > >>Newbie. REAL OT's had 300 baud modems. :-)
> > >>
> > >>--
> > >>Bill, W6WRT
> > >>QSLs via LoTW
> > >>
> > >
> > >
> > > Acoustic!!!!
> > >
> > > Ed
> > > wb6wsn
> > >
> > Yeah really want slow. . . you ain't done slow till you done 110 Baud.
> >
> > QFV
>
> In the Summer of 1970 I worked for NASA on the Tektite II project, St
Johns,
> US Virgin Islands.
> I was a behavior observer when I wasn't operating my Swan or diving.
> We took data on IBM cards by punching holes with a stylus.
> Manually, like they used to vote in Florida.
>
> The cards were then taken by boat to an engineering firm on St Thomas that

> could put them in a card reader and transfer the data to magnetic tape.
> The tape was then flown to Austin, Texas for analysis. That was slow.
>
> For ham radio I used a dipole. Phone patches back to Texas were
consistently
> more reliable than the local phones.
>
> Now in my job I plan on remoting data acquisition in remote areas via a
> satellite internet connection.
>
> My "dial-up" was a TI Silent 700; circa 1977.
>
> 73
> H.
> NQ5H

I had one of those TI terminals; it was a real step up from the ASR-33 TTY. I remember that the TI printhead, on the backside of a little aluminum plate, was real finicky about the paper. If you used TI roll paper, everything was good, since the TI paper was slightly "slippery". But if you put a roll of HP paper in it, the harder surface HP paper would rather quickly grind off the thermal elements of the printhead.

It would then become a very silent 700!

Ed
wb6wsn

1203. NEED HELP installing GSM antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 05:56:01 UTC
From: ash <ashot.shahbazian@covad.net>
Message-ID: <53f9d$410dd77c$40694c09$30864@msgid.meganewsservers.com>
Source record: 91474

We're looking for a cellular antenna specialist in Hartford, CT area. The task is to install four rooftop 1900 mHz GSM directional antennas, each aimed at a different base station. The person needs to have experience in antenna installations and a GSM tester, or a modified handset showing BS numbers and signal strength.

1204. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 05:59:25 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <RKkPc.13759$3G6.4666@bignews3.bellsouth.net>
Source record: 91475

Well, If light is slowing down, and time is passing faster, is the 'faster'
referring to 'current time' - or 'future time' ?
OR - is time going slower?
- and who's watch are they using to 'time' all this?

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040801160817.29796.00002244@mb-m18.aol.com...
> Interesting article at
> http://www.freerepublic.com/focus/news/1182979/posts?page=22
> so much for my 300,000 km/s "constant" :-(
>
> extract:
> >>The theory is deceptively simple: The speed of light is not constant, as
> we've been taught since the early 1930s, but has been steadily slowing
since
> the first instance of time.
>
> If true, virtually all aspects of traditional physics are affected,
including
> the presumed steady state of radioactive decay used to measure geologic
time.
>
> It's an intriguing story - and like many revolutions in science, it begins
> with observations that just don't fit currently accepted scientific dogma.
<<
>
>
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1205. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 05:59:25 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <wQkPc.28972$mg6.19198@fed1read02>
Source record: 91476

> "Ed Price" <edprice@cox.net> wrote in message
> news:Lm1Pc.27007$mg6.1485@fed1read02...
> >
> > "Bill Turner" <noway@nohow.com> wrote in message
> > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> > > On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt
<spamfree@myhome>
> > > wrote:
> > >
> > > >to get to our 1200
> > > >baud modems...
> > >
> > > ____
> > >
> > > Newbie. REAL OT's had 300 baud modems. :-)
> > >
> > > --
> > > Bill, W6WRT
> > > QSLs via LoTW
> > >
> >
> > Acoustic!!!!
> >
> > Ed
> > wb6wsn
> >

"Dave" <noone@nowhere.com> wrote in message
news:bM-dnSvcA_BeUJHcRVn-gw@crocker.com...
> you young-uns are all alike... think you had it tough. heck, in my day we
> only had 110 baud acoustic modems and had to save our programs on punched
> paper tape! by gollee by gum and we had to walk uphill 10 miles both ways
> to school in raging blizzards with 50# bookbags.
>

I had to burn the chard to keep warm!
I was so happy to get a TTY ASR-33, cause it made chard lots faster than the
old keypunch machine.

Ed
wb6wsn

1206. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 06:06:11 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <gRkPc.28978$mg6.24716@fed1read02>
Source record: 91477

```
"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:ps5Pc.4920$cK.4392@newsread2.news.pas.earthlink.net...
>
> "mike" <n0qfv@stic.net> wrote in message
> news:410cd3a2$0$74192$39cecf19@news.twtelecom.net...
> > Ed Price wrote:
> > > "Bill Turner" <noway@nohow.com> wrote in message
> > > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> > >
> > >>On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt
<spamfree@myhome>
> > >>wrote:
> > >>
> > >>
> > >>>to get to our 1200
> > >>>baud modems...
> > >>
> > >>_____________________________________________________
> > >>
> > >>Newbie. REAL OT's had 300 baud modems. :-)
> > >>
> > >>--
> > >>Bill, W6WRT
> > >>QSLs via LoTW
> > >>
> > >
> > >
> > > Acoustic!!!!
> > >
> > > Ed
> > > wb6wsn
> > >
> > Yeah really want slow. . . you ain't done slow till you done 110 Baud.
> >
> > QFV
>
> In the Summer of 1970 I worked for NASA on the Tektite II project, St
Johns,
> US Virgin Islands.
> I was a behavior observer when I wasn't operating my Swan or diving.
> We took data on IBM cards by punching holes with a stylus.
> Manually, like they used to vote in Florida.
>
> The cards were then taken by boat to an engineering firm on St Thomas that
```

> could put them in a card reader and transfer the data to magnetic tape.
> The tape was then flown to Austin, Texas for analysis. That was slow.
>
> For ham radio I used a dipole. Phone patches back to Texas were
consistently
> more reliable than the local phones.
>
> Now in my job I plan on remoting data acquisition in remote areas via a
> satellite internet connection.
>
> My "dial-up" was a TI Silent 700; circa 1977.
>
> 73
> H.
> NQ5H
>
>

Howard, I think you control the high-ground of futility.
I was using an IBM keypunch machine (literally the size of an office desk)
circa 1966 to create Fortran fun. But I only heard legends of people
punching cards with a hand-held punch, and to think you were using a stylus.
Why, that must have been before Xacto knives were invented!

Ed
wb6wsn

1207. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 06:16:39 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <n3+1AuBHxdDBFAgy@ifwtech.co.uk>
Source record: 91478

Cecil Moore wrote:
>that drift is
>the effect of seconds getting shorter as the universe ages. Proof is that I
>once could run 100 yards in 12 seconds. Now, since seconds are shorter, it
>takes me twice as many seconds to cover 100 yards. :-)

Or as my Uncle Jack used to say: "When I was young, I could drive a
half-hour in twenty minutes... but now it takes me more like
three-quarters."

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1208. Re: NEED HELP installing GSM antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 07:33:33 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <fb71u1-2t2.ln1@p400bob.lse.com.au>
Source record: 91484

I realise this isnt what you are after....

There is shareware s/w around for turning on the "Net monitor" function
of a Nokia phone. This shows signal strength and all the base stations.
I assume there will be similar software for other phones.

The s/w I know of is "logomanager"

Cheers Bob

ash wrote:
> We're looking for a cellular antenna specialist in Hartford, CT area. The
> task is to install four rooftop 1900 mHz GSM directional antennas, each
> aimed at a different base station. The person needs to have experience in
> antenna installations and a GSM tester, or a modified handset showing BS
> numbers and signal strength.
>
>
>
>

1209. Re: PLEASE READ - Internet site under legal attack by Radioshack corp.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 07:49:59 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10grshao0kg6sc5@corp.supernews.com>
Source record: 91479
Cross-posted to: alt.radio.wktu,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Well, I find it hard to believe that, in a weak moment, I visited the site mentioned below. It is obvious that a great deal of time and effort has gone into this thing, and to what cause? To save our rights? Me thinks not. What rights are we having trampled? You're right to slander RadioShack? That right is only in your mind. You are most likely a relatively well educated individual with many personal conflicts in his life and I feel deeply for you, but mostly your parents and family members. They most likely put up with your drivvel year after year and detest the site of you.

Why don't we just cut to the chase, and you explain, in a very short sentence or a very, very short paragraph what caused you to create this Radio Shack site that you claim sucks so bad that it has obviously destroyed your life and those of your loved ones? When They haven't harmed you. You are harming them by saying to the world that they suck.

I have enjoyed Radio Shack for many years. I was there when they became RadioShack, and I became a valued customer (I believe that because I still get free catalogs in the mail, not many do anymore 'ya know) to them and grew through the whole gammit of stuff they have added over the years and I must say that when I had a problem with a product, and that was extremely rare, they took care of it. In one case the manager returned my money because it was a last item and he couldn't replace it. A few years later when computers came along if this had happened, they could check all the stores in their system to see who still had it on the shelf and that store would mail it to me at my home. Is that cool? I say "Yea Verily".

I love Radio Shack. This little reply is probably enough to get you to open up KF5DEsucks.com I won't sue you unless you get nasty. All my friends will check in and post there I'm sure they will have comments to make there, they have a lot of freee speech to use 'ya know. I have a friend that can enlist, in moments hundreds of hackers that believe in not only free speech but free hacking tooo!! Free viruses', free wurmzs, 'n free other stuff too.

After that you can open up another site, KF5DEreallysucks.com

Or, you can channel your efforts into something productive and usefull and possibbly profitable for yourself and your suffering family which will no doubt heal many open wounds.

Butch Magee, KF5DE
Diamondhead, MS 39525
wow, just can't believe i'm gonna push that send icon.

DSL wrote:

> For more information and daily updates please visit:
> http://socaltom.blogspot.com/
>
>

1210. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 07:51:21 UTC
From: xray <notreally@hotmail.invalid>
Message-ID: <2esrg0lsskqqhvp2cns961e85o6ra1ri9f@4ax.com>
Source record: 91481
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 17:48:01 -0700, Jim Thompson
<thegreatone@example.com> wrote:

>On Sun, 01 Aug 2004 17:32:25 -0700, John Larkin
><jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:
>
>[snip]
>>Smith charts can be used to solve purely lumped-element problems, too.
>>
>>I wonder if Smith charts have ever been used for analyzing 50/60 Hz
>>power grids. Their losses are fairly low.
>>
>>John
>
>I wouldn't be surprised... I've been told that they locate power line
>faults using a reflectometer.

With power on or off? If they can do it with the power on, they might
just have a chance of getting BPL to work.

Naah! Why did I say that? May BPL die an early and well deserved death.

1211. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 07:53:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5lorg05q2ie059nblq6puqhv7op9t25hvu@4ax.com>
Source record: 91480
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Mon, 2 Aug 2004 00:48:18 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote:

>> I suspect that you measured capacitance directly with either a
>> capacitance bridge or a DMM.
>
>I did.
>
>> Those won't work because they don't use
>> RF frequencies.
>
>They work just fine. I use them all the time, on the job and else where.

Hi Leland,

They may work fine, but having an answer does not make it accurate.
You clearly state this on your own further down the page in your
response (I shan't duplicate it).

>> I suggested the use of an impedance bridge and
>> explained the reasons why the frequency was important.
>
>For checking capacitance in general the answer is no, unless the dielectric
>shows extreme variations verses frequency and has a high loss tangent.

However, this is one component you have not measured, and admittedly
so. It also begs discussing other sources of failure that go
undetected. Extrapolation from 1Khz to 27Mhz is tenuous if not
fraught with large scale error.

> About the ESR, equivalent
>series resistance, which is composed of mainly skin effect on the plates and
>losses in the dielectric, this appears in series with the capacitance and
>simply adds to the resistive feed point impedance of the antenna.

This talks to the difference between having a good match, and having a
good radiator. The two have nothing to do with one or the other. If
you can confine a "bad match" to the points between the ends of a
radiator, the state of mismatch is immaterial (and in fact, most
common implementations of antennas - monopoles, dipoles - do support a
mismatch with a standing wave along their entire length notably
described as the current/voltage distribution). All such antennas
find it quite within their ability to ring with standing waves and be
highly efficient.

>The feed
>point impedance of a typical 1/4 wave ground plane with the radials at 90
>degrees to the vertical element is around 30 to 40 ohms, so a bit of extra
>resistance makes the match look better at the expense of a lower over all
>antenna efficiency.

The "bit" of extra resistance so sought (and presumably to the market advantage) comes to upwards of 20 Ohms by your estimation above. With this logic you could just as well glue the antenna to cardboard, add a resistor and make the same claims. The lower efficiency so casually dismissed runs to 4dB; however, that is at the extreme of your range.

This gracious discarding of power only speaks of the scenario where the "capacitor" of the mount has short leads - but it doesn't. Most mag-mounts have several many feet of cable leading back to the source, which then matches that length through the chassis to return to the opposite side of the "plate" supported by the sheet metal beneath the mount.

If simple math employing mount radius, paint thickness and the like sufficed to explain how mag-mounts "need" their capacitance to appear beneath them; then the same analysis can be applied to the cable that leads to the same mag-mount's plate. I would offer that a simple six foot length of that cable, ordinary rg-58 (shield O.D. at 0.195" with overall O.D. at 0.210"), offers on the order of 40 odd square inches of surface area. Being a cylinder, not all of that surface is in close contact with the chassis as it is routed along to the mag-mount. As such, I will assign it a plate separation distance of half the overall cable O.D. or 0.105". Plugging and chugging through the standard formulas results in several hundred pF.

>Capacitive coupling to the body of the car is required,

So, by the faith of needed capacitance at the mount ("how else would it work?"), we find there is as much (and likely more) capacitance found in the cable leading to it. If the mount's was more than necessary, it would seem the cable obviated it well in advance. Hence, the "need" of this capacitor is practically nil as it already comes free with the transmission line - and let's face it, a six foot line is fairly short.

Really, when valid measurements are replaced with faith-based logic, this argument that there is some virtue in a lossy capacitor is strictly for advertising copy and if it blew away in the wind, no one would miss it (and possibly they would get out further).

73's
Richard Clark, KB7QHC

1212. Re: asking for moble antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 07:55:48 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10grss7sh6vk313@corp.supernews.com>
Source record: 91482

They have one Mark. It's called the "outbacker". I never liked mine,
but many people do like theirs.

Butch KF5DE

Lushy wrote:

> Here in Australia we have a multi tapped vertical antenna I think it is
> called a Bush Bandit, you can also order specific freqs as well.
> VK3HDL
> Rye Victoria Australia
> "W4UDX" <w4udx@bellsouth.net> wrote in message
> news:3DxNc.22716$QO.21230@bignews5.bellsouth.net...
>
>>I don't think such an antenna exists. Mobile HF antennas are physically
>>shortened, with loading coils or resonators, and by nature have a narrow
>>bandwidth. To cover the frequencies you mentioned, some tuning is going to
>>be required for greater bandwidth.... either an antenna tuner at the rig,
>>near the antenna, or built-in to the antenna (such as the "screwdriver"
>>types). You could use the economical Hustler mobile antenna system with
>
> the
>
>>multi resonator adapter, which allows for up to 4 bands to be use (I
>
> think),
>
>>but even then, each resonator is going to have only a certain bandwidth,
>
> and
>
>>to go from the CW portion of the band to the SSB portion may require
>>adjusting the tip on the end of the resonator. Not to mention the whole
>>thing would be seriously gawdy looking. Icom and Yeasu both make remote
>>tunable mobile antennas, but like the screw-driver types, they can be
>>pricey. I would home brew an "Outbacker" type of antenna and just change
>
> the
>
>>fly lead connection when you want to change bands.... There are websites
>>that show how to build them using various materials.
>>
>>73
>>Mark W4UDX
>>

>>
>>"paul" <paul_welch@webtv.net> wrote in message
>>news:6201-410623AB-511@storefull-3337.bay.webtv.net...
>>
>>>best moble antenna for a yaesu 707 ham rig
>>>that wil giv a 1.1 swr at
>>>10 mhz to 30 mhz ..can you help
>>>
>>
>>
>
>

1213. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 08:03:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1qsrg092af6bghgbc5d8pq4ovjlufs6fd4@4ax.com>
Source record: 91483

On Mon, 2 Aug 2004 01:59:25 -0400, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>Well, If light is slowing down, and time is passing faster, is the 'faster'
>referring to 'current time' - or 'future time' ?
>OR - is time going slower?
>- and who's watch are they using to 'time' all this?

Hi Hal,

You've hit the nail on the head. The other howler is when they claim
to have researched old data showing:
>In 1738: 303,320 +/- 310 km/second
What km? There was no such unit of measure then. Of course, they
could have guessed to an accuracy of 0.1% couldn't they? Same with
their watch. I don't suppose it was an Oyster Rolex.

Creationist "science" is so amusing. Seems faith isn't enough
anymore.

73's
Richard Clark, KB7QHC

1214. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 10:59:06 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040802065906.157$Uv@newsreader.com>
Source record: 91485
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,rec.radio.amateur.policy

```
"I ain't George either" <KennelMaster@not-here.com> wrote:
> "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> news:20040801113640.084$B3@newsreader.com...
> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > > Not really. Consider a magnetic base of 2 inches in diameter sitting
> > > on
> a
> > > painted metal
> > > surface with 0.010 inches of paint. Then as an approximation I
> > > looked
> up
> > > the dielectric constant for epoxy, 3.62, to use for the paint.
> > >
> > LMFAO! Look how lelnad the fuckstick ran his coax into his section
> > eight apartment.
> >
> > http://img32.exs.cx/my.php?loc=img32&image=scan59.jpg
> >
> > Yea..he's an expert at this stuff. <eg>
>
> Looks like Spiderman tried to help him weatherproof the entrance!
>
DOH!...custom!
```

1215. Re: NEED HELP installing GSM antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 11:13:29 UTC
From: Dave <noone@nowhere.com>
Message-ID: <f46dnSuhNI5DvJPcRVn-og@crocker.com>
Source record: 91486

why in the world would you need to do that?? why not ask your gsm provider,
wouldn't they want to know that you are doing something like this? do they
have any alternative??

"ash" <ashot.shahbazian@covad.net> wrote in message
news:53f9d$410dd77c$40694c09$30864@msgid.meganewsservers.com...
> We're looking for a cellular antenna specialist in Hartford, CT area. The
> task is to install four rooftop 1900 mHz GSM directional antennas, each
> aimed at a different base station. The person needs to have experience in
> antenna installations and a GSM tester, or a modified handset showing BS
> numbers and signal strength.
>
>
>
>

1216. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 11:17:34 UTC
From: Dave <noone@nowhere.com>
Message-ID: <B-idnSTGNahJv5PcRVn-vQ@crocker.com>
Source record: 91487

this is old stuff. last i had heard this was debunked by measurements of
the fine structure constant from distant stars. supposedly this constant
would also change if c changed, but didn't. personally i rather like that
theory, but apparently it doesn't fit all the observations.

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040801160817.29796.00002244@mb-m18.aol.com...
> Interesting article at
> http://www.freerepublic.com/focus/news/1182979/posts?page=22
> so much for my 300,000 km/s "constant" :-(
>
> extract:
> >>The theory is deceptively simple: The speed of light is not constant, as
> we've been taught since the early 1930s, but has been steadily slowing
since
> the first instance of time.
>
> If true, virtually all aspects of traditional physics are affected,
including
> the presumed steady state of radioactive decay used to measure geologic
time.
>
> It's an intriguing story - and like many revolutions in science, it begins
> with observations that just don't fit currently accepted scientific dogma.
<<
>
>
>
>

1217. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 11:23:40 UTC
From: Floyd Sense <sentek@sprintmail.com>
Message-ID: <0vpPc.6400$9Y6.2041@newsread1.news.pas.earthlink.net>
Source record: 91488

Steppir sells a device called the BoomSlide which makes it possible to install or take down the antenna one element at a time. The device clamps to the boom/mast plate and cradles the boom, allowing it to slide forward and backwards. So, you could simply remove the driven element and lower it separately. Since the element mounting brackets are fixed to the boom, you have no problem aligning the individual elements to the boom when reinstalling them.

K8AC

"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:410d525e@news.vo.lu...
> Hi
>
> One of my friend come home with a fine question.
> He is in the process to buy a new beam and found Steppir quite interesting
> due to its auto adjusting without moving the elements (all tuning per band
> is made inside the tubes in winding up a copper strap).
>
> Question to Steppir users as I am not sure of the answer:
>
> Is the separation between parasitic elements important as, in all cases,
> there is an adjustment on each band ?
> We ask for the question because we would like to move the central element
of
> a 3-ele steppir multiband beam of about 50 cm to the right /left in order
to
> be able to take the antenna down to the ground (around the pylon). Up to
now
> the central element is in the passage. A way should be to me it slightly
to
> the L or R...
>
> Is it possible or not without changing the performance (mainly SWR) of the
> Steppir ?
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>

1218. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 11:35:04 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <IFpPc.6402$9Y6.929@newsread1.news.pas.earthlink.net>
Source record: 91489

who's howard?
"Ed Price" <edprice@cox.net> wrote in message
news:gRkPc.28978$mg6.24716@fed1read02...
>
> "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
> news:ps5Pc.4920$cK.4392@newsread2.news.pas.earthlink.net...
> >
> > "mike" <n0qfv@stic.net> wrote in message
> > news:410cd3a2$0$74192$39cecf19@news.twtelecom.net...
> > > Ed Price wrote:
> > > > "Bill Turner" <noway@nohow.com> wrote in message
> > > > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> > > > >
> > > > >>On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt
> <spamfree@myhome>
> > > > >>wrote:
> > > > >>
> > > > >>
> > > > >>>to get to our 1200
> > > > >>>baud modems...
> > > > >>
> > > > >>____
> > > > >>
> > > > >>Newbie. REAL OT's had 300 baud modems. :-)
> > > > >>
> > > > >>--
> > > > >>Bill, W6WRT
> > > > >>QSLs via LoTW
> > > > >>
> > > > >
> > > > >
> > > > > Acoustic!!!!
> > > > >
> > > > > Ed
> > > > > wb6wsn
> > > > >
> > > > Yeah really want slow. . . you ain't done slow till you done 110 Baud.
> > > >
> > > QFV
> > >
> > In the Summer of 1970 I worked for NASA on the Tektite II project, St
> Johns,
> > US Virgin Islands.
> > I was a behavior observer when I wasn't operating my Swan or diving.

> > We took data on IBM cards by punching holes with a stylus.
> > Manually, like they used to vote in Florida.
> >
> > The cards were then taken by boat to an engineering firm on St Thomas
that
> > could put them in a card reader and transfer the data to magnetic tape.
> > The tape was then flown to Austin, Texas for analysis. That was slow.
> >
> > For ham radio I used a dipole. Phone patches back to Texas were
> consistently
> > more reliable than the local phones.
> >
> > Now in my job I plan on remoting data acquisition in remote areas via a
> > satellite internet connection.
> >
> > My "dial-up" was a TI Silent 700; circa 1977.
> >
> > 73
> > H.
> > NQ5H
> >
> >
>
> Howard, I think you control the high-ground of futility.
> I was using an IBM keypunch machine (literally the size of an office desk)
> circa 1966 to create Fortran fun. But I only heard legends of people
> punching cards with a hand-held punch, and to think you were using a
stylus.
> Why, that must have been before Xacto knives were invented!
>
> Ed
> wb6wsn
>

1219. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 12:12:09 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <hh8sg056hnve2jcmv7vjsud5me6bls5lr0@4ax.com>
Source record: 91490
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Mon, 2 Aug 2004 00:48:18 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote in <3YGdnXvRt7gaWpDcRVn-iQ@comcast.com>:

<snip>
>> I suspect that you measured capacitance directly with either a
>> capacitance bridge or a DMM.
>
>I did.
>
>> Those won't work because they don't use
>> RF frequencies.
>
>They work just fine. I use them all the time, on the job and else where.

I

>> I suggested the use of an impedance bridge and
>> explained the reasons why the frequency was important.
>
>For checking capacitance in general the answer is no, unless the dielectric
>shows extreme variations verses frequency and has a high loss tangent. For
>many materials this variation is rather small, and car paint doesn't
>dielectric heat much, so the loss tangent is low.

Ever wonder why so many different types of capacitors exist? I mean,
if the dielectric properties of so many materials had such little
variation with frequency, why the need for so many different types?
Why are mica, air and vacuum caps sometimes preferred for RF over
ceramic? Why not just use electrolytics? Of course you know the
answer, and that's why if you are going to measure a capacitor you
MUST measure it at the operating frequency. And, if possible, under
load.

> About the ESR, equivalent
>series resistance, which is composed of mainly skin effect on the plates and
>losses in the dielectric, this appears in series with the capacitance and
>simply adds to the resistive feed point impedance of the antenna. The feed
>point impedance of a typical 1/4 wave ground plane with the radials at 90
>degrees to the vertical element is around 30 to 40 ohms, so a bit of extra
>resistance makes the match look better at the expense of a lower over all
>antenna efficiency.

ESR is not just skin effect and dielectric losses. But skin effect
-is- a major factor where ferromagnetic conductors are concerned; and
dielectric losses in many materials mount up quickly with frequency.

Regardless, you didn't measure the impedance at operating frequency so
you don't know the ESR.

> Capacitive coupling to the body of the car is required,

That's just flat-out wrong. Except for the inevitable capacitive field
between the radiator and the ground, capacitive coupling is not a
prerequisite for the antenna to operate. This is clearly proven by NGP
antennas, which use a specific length of coax as the counterpoise. In
case you never noticed, most CB mag-mount antennas come with the very
same length of coax already attached, which should give you a clue as
to how mag-mounts are grounded.

>if there is no direct connection, to mirror the 1/4 wave element, thus
>producing the required 1/2 wave element needed for a resonate antenna.
>Losses in the car body material are a completely separate issue and has
>nothing to do with how the coax gets coupled to the car body.

Losses in the vehicle body have a great deal to do with any capacitive
coupling to the body. If the losses in the steel are high (due to
whatever factors involved), the result will be excessive ESR in the
coupling, and the ground impedance presented to the coax is also going
to be high. And unless you have some other way of setting the antenna
end of the coax shield at RF ground you are going to get RF on the
shield.

>Now if you wanted to measure inductance I would say yes because you have
>capacitance between turns that effectively reduces the inductance and since
>the capacitance electricaly apperas in series with it. The same applies to
>measuring coil Q, and that is because of skin effect and proximity effect.

As with ESR, there are many factors that will affect the Q of a coil,
not the least of which is the permeability and magnetic losses of any
material in and around the coil. But what coil? I thought this was
about the capacitive coupling of a mag-mount antenna base?

>> As I said
>> before, if you measure it as I described, the results will be
>> significantly lower than your measured 490 pF.
>
>Measurements are fine, but you also have to know when your equipment is
>lying. Poor application of test equipment, failure to understand the
>limitations of the equipment etc can lead one down the preverbal garden path
>with no warning.

I agree 100%. And for that same reason you should know that you can't
measure impedance at 27 MHz using a capacitance tester that works on
audio freqs. Not to sound demeaning, but you should have learned that
much in freshman physics.

> I get a kick out of new hires when they ask me why the
>waveforms they see don't look right on the scope, meter measurements don't
>look right etc. Then I get to show them all the wonderful ways test gear can

>screw up and never give you a hint what they're measuring is garbage but yet
>there is nothing wrong with the instruments they are using. One of my
>favorites is flipping the leads on a digital meter and watch the reading
>change 20 percent or more. Most digital meters don't use true differential
>inputs so the ground side of the meter is at potential and also allows noise
>in to the meter electronics. The ones that do have much less of a problem
>like the above. I could go on about what happens to scopes connected to
>high frequency signals with funny waveforms, high-pots that are not properly
>ground referenced, hall-effect current sensors etc.

I can't say I have ever seen a DMM measure different with the leads
reversed. But then I rarely use anything other than my Wavetek.

>They way to guard against this is to use your head. If the measurement says
>one thing and a quick calculation, particular if its a simple one, says you
>should have something significantly different you really need to consider
>you have a measurement problem of some kind. Nobody would have bothered to
>produce all the wonderful formulas, equations, and stuff your head with
>theory if it didn't work. I've seen to many people get hung up wasting time
>over a bad measurement, and didn't trust their calculations enough to
>question what they were seeing. It won't be the first time I went to help
>somebody and ended up taking the scope probe and throwing it in the trash.
>The look on their face when what they calculated matches the scope with a
>new functioning probe is priceless.

One issue you fail to consider is the possibility of error because
your measurement 'seems' correct; i.e, it's what you expect to see.
Happens all the time with inexperienced techs.

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1220. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 12:32:29 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410e3590_5@corp.newsgroups.com>
Source record: 91491

Hal Rosser wrote:
> - and who's watch are they using to 'time' all this?

The relativistic effects affect all watches. However,
the time drift can be observed by comparing atomic
clocks to Bristlecone Pine rings - they don't match.
The farther back in time they are compared, the farther
apart they appear to be in time.

Seconds are getting shorter. That means the universe
is not as old as we think. We are assuming that seconds
have been constant since the beginning of the universe.
How old would the universe be if each second were half
as long as the previous one?

There is supposed to have been an inflationary phase to
the early universe. What if the inflationary phase never
ceased and we are still in it? That could explain the
illusion of dark matter and dark energy.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1221. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 12:40:01 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <38dsg0tdj1s1rdio9s8rb55aq0lm1l4k2r@4ax.com>
Source record: 91492

On Sun, 1 Aug 2004 22:46:17 -0700, "Ed Price" <edprice@cox.net> wrote:
>
>And if you were civilized, you wouldn't be a bootlegger.
>

I frequently break the speed limit when I'm driving, too.

Seriously though, the signal never makes it to the nearest
neighbor's house. Is it a rules infraction? Yes. Is anyone
else affected or going to complain? No.

--
-fb-

1222. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 12:40:57 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410e378c_5@corp.newsgroups.com>
Source record: 91495
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

xray wrote:

> On Sun, 01 Aug 2004 17:48:01 -0700, Jim Thompson
> <thegreatone@example.com> wrote:
>>I wouldn't be surprised... I've been told that they locate power line
>>faults using a reflectometer.
>
> With power on or off? If they can do it with the power on, ...

A solid power line fault usually causes removal of power
from the section of line exhibiting the fault. However,
automatic reclosure will often clear the fault.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1223. Re: NEED HELP installing GSM antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 12:42:09 UTC
From: Ashot Shahbazian <ashot.shahbazian@covad.net>
Message-ID: <6cee5$410e36ab$40694c09$4472@msgid.meganewsservers.com>
Source record: 91493

Bunch of modems - to avoid overloading the BS during rush-hours. Any
advise?

"Dave" <noone@nowhere.com> ������/������ ? ������ ?????: news:f46dnSuhNI5DvJPcRVn-og@crocker.com...
> why in the world would you need to do that?? why not ask your gsm
provider,
> wouldn't they want to know that you are doing something like this? do
they
> have any alternative??
>
> "ash" <ashot.shahbazian@covad.net> wrote in message
> news:53f9d$410dd77c$40694c09$30864@msgid.meganewsservers.com...
> > We're looking for a cellular antenna specialist in Hartford, CT area.
The
> > task is to install four rooftop 1900 mHz GSM directional antennas, each
> > aimed at a different base station. The person needs to have experience
in
> > antenna installations and a GSM tester, or a modified handset showing BS
> > numbers and signal strength.
> >
> >
> >
> >
>
>

1224. Re: NEED HELP installing GSM antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 12:43:22 UTC
From: Ashot Shahbazian <ashot.shahbazian@covad.net>
Message-ID: <b7c24$410e36f3$40694c09$4480@msgid.meganewsservers.com>
Source record: 91494

Thanks a bunch Bob! I'll look for it

"Bob Bob" <bcnntp@optusnet.com.au> ???????/???????? ? ???????? ?????????:
news:fb71u1-2t2.ln1@p400bob.lse.com.au...
> I realise this isnt what you are after....
>
> There is shareware s/w around for turning on the "Net monitor" function
> of a Nokia phone. This shows signal strength and all the base stations.
> I assume there will be similar software for other phones.
>
> The s/w I know of is "logomanager"
>
> Cheers Bob
>
>
> ash wrote:
> > We're looking for a cellular antenna specialist in Hartford, CT area.
The
> > task is to install four rooftop 1900 mHz GSM directional antennas, each
> > aimed at a different base station. The person needs to have experience
in
> > antenna installations and a GSM tester, or a modified handset showing BS
> > numbers and signal strength.
> >
> >
> >
> >

1225. mylar properties ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 13:34:39 UTC
From: JJ <Sonbo@comcast.net>
Message-ID: <2n6u46Ftaim6U1@uni-berlin.de>
Source record: 91496

Will mylay work to reflect 2.4g radio waves ?
Trying to make a parabolic reflector for my laptop.

1226. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 13:35:26 UTC
From: "H. Adam Stevens" <mayaone@earthlink.net>
Message-ID: <yqrPc.6457$9Y6.937@newsread1.news.pas.earthlink.net>
Source record: 91497

oh that howard!
"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:IFpPc.6402$9Y6.929@newsread1.news.pas.earthlink.net...
> who's howard?
> "Ed Price" <edprice@cox.net> wrote in message
> news:gRkPc.28978$mg6.24716@fed1read02...
> >
> > "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
> > news:ps5Pc.4920$cK.4392@newsread2.news.pas.earthlink.net...
> > >
> > > "mike" <n0qfv@stic.net> wrote in message
> > > news:410cd3a2$0$74192$39cecf19@news.twtelecom.net...
> > > > Ed Price wrote:
> > > > > "Bill Turner" <noway@nohow.com> wrote in message
> > > > > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
> > > > > >
> > > > > >On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt
> > <spamfree@myhome>
> > > > > >wrote:
> > > > > >>
> > > > > >>
> > > > > >>>to get to our 1200
> > > > > >>>baud modems...
> > > > > >>
> > > > > >>____
> > > > > >>
> > > > > >>Newbie. REAL OT's had 300 baud modems. :-)
> > > > > >>
> > > > > >>--
> > > > > >>Bill, W6WRT
> > > > > >>QSLs via LoTW
> > > > > >>
> > > > > >
> > > > > >
> > > > > > Acoustic!!!!
> > > > > >
> > > > > > Ed
> > > > > > wb6wsn
> > > > > >
> > > > > Yeah really want slow. . . you ain't done slow till you done 110
> > Baud.
> > > > >
> > > > QFV
> > > >

> > > In the Summer of 1970 I worked for NASA on the Tektite II project, St
> > Johns,
> > > US Virgin Islands.
> > > I was a behavior observer when I wasn't operating my Swan or diving.
> > > We took data on IBM cards by punching holes with a stylus.
> > > Manually, like they used to vote in Florida.
> > >
> > > The cards were then taken by boat to an engineering firm on St Thomas
> that
> > > could put them in a card reader and transfer the data to magnetic
tape.
> > > The tape was then flown to Austin, Texas for analysis. That was slow.
> > >
> > > For ham radio I used a dipole. Phone patches back to Texas were
> > consistently
> > > more reliable than the local phones.
> > >
> > > Now in my job I plan on remoting data acquisition in remote areas via
a
> > > satellite internet connection.
> > >
> > > My "dial-up" was a TI Silent 700; circa 1977.
> > >
> > > 73
> > > H.
> > > NQ5H
> > >
> > >
> >
> > Howard, I think you control the high-ground of futility.
> > I was using an IBM keypunch machine (literally the size of an office
desk)
> > circa 1966 to create Fortran fun. But I only heard legends of people
> > punching cards with a hand-held punch, and to think you were using a
> stylus.
> > Why, that must have been before Xacto knives were invented!
> >
> > Ed
> > wb6wsn
> >
>
>

1227. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 13:42:47 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <ppdsg054qspj03b86jjmokafmsqp5egj5a@4ax.com>
Source record: 91498
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Mon, 02 Aug 2004 07:53:30 GMT, Richard Clark <kb7qhc@comcast.net>
wrote in <5lorg05q2ie059nblq6puqhv7op9t25hvu@4ax.com>:

<snip>
>......I would offer that a simple six
>foot length of that cable, ordinary rg-58 (shield O.D. at 0.195" with
>overall O.D. at 0.210"), offers on the order of 40 odd square inches
>of surface area. Being a cylinder, not all of that surface is in
>close contact with the chassis as it is routed along to the mag-mount.
>As such, I will assign it a plate separation distance of half the
>overall cable O.D. or 0.105". Plugging and chugging through the
>standard formulas results in several hundred pF.

Now THERE'S something I haven't tried, so I went out and tried it. I
ended up doing four tests:

1. I cut six feet of RG-58/U and layed it loose in the bed of my S-10.
At 27 MHz it measured 100 pF, and 130 pF when held flat and straight
by putting a 2x4 on top it. Impedance was about 70 ohms and 55 ohms,
respectively.

2. I unplugged both ends of my installed coax (~12' of RG-8/U) and
tested. Measured from the antenna end, capacitance was 390 pF and
impedance a little under 20 ohms.

3. I plugged the RG-8 back into the radio (radio is mounted directly
to the truck chassis on the hump). Again measured from the antenna
end, capacitance dropped to about 310 pF and impedance rose to about
25 ohms.

4. With the coax still plugged into the radio, the GDO was brought up
to the resonance of the coax, which dipped at around 45 MHz (GDO dial
isn't too accurate). Capacitance was unmeasurable and impedance
dropped to about 3 ohms (estimated).

And for the sake of mentioning it, I tested the ground impedance of
mag-mount bases many years ago when I still thought mag-mounts were a
neat idea. The typical measured impedance was several hundred ohms.

Now anyone can draw their own conclusions from these tests, but IMO
they serve to reinforce my previous conclusion that mag-mount antennas
work by using the coax as the ground, -not- any capacitive coupling at
the base. The capacitance at the base may contribute to the ground
when the coax isn't resonant, but only minimally.

Thanks for the idea, Richard.

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1228. Re: mylar properties ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 13:47:21 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <b4GdnaR4KdpU2JPcRVn-rg@comcast.com>
Source record: 91499

"JJ" <Sonbo@comcast.net> wrote in message
news:2n6u46Ftaim6U1@uni-berlin.de...
> Will mylay work to reflect 2.4g radio waves ?
> Trying to make a parabolic reflector for my laptop.
>

Silvered mylar will.

1229. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 13:48:37 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <VCrPc.742$i%2.641@newssvr22.news.prodigy.com>
Source record: 91500

I am thinking about going either lowfer 1750 meters 49mhz Hifer 13.55 MHz what do you guys think about that. If you had to pick out of those which one would you chose need more info on the one you chose . Thanks for all the help guys.

1230. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 14:07:28 UTC
From: Green Hornet <GH@comic.net>
Message-ID: <AUrPc.3059$wz.2932@fed1read01>
Source record: 91501

```
It is humor me lads -- humor

--
El Hornet Verde
-----------------
"David G. Nagel" <nagel@core.com> wrote in message
news:10gr5f4ppe21a63@corp.supernews.com...
> Thierry wrote:
> > "Green Hornet" <GH@comic.net> wrote in message
> > news:FkdPc.3006$wz.253@fed1read01...
> >
> >>Have you read "The Tower"
> >>http://www.speroni.com/Tower.html
> >>
> >
> >
> > One more human mistake... an incredible one indeed !
> >
> > It reminds me Tex Avery's Coyote who could not do better ;-)
> >
> > Thierry
> >
> >
> >>--
> >>El Hornet Verde
> >>
> >>
> >
> >
> >
> I beleive that the "Mythbusters" TV show demonstrated that this could
> not happen.
>
> Dave WD9BDZ
>
```

1231. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 14:12:34 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <nZrPc.1131$Yf6.45@lakeread03>
Source record: 91502
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Hal Rosser" <hmrosser@bellsouth.net> wrote
> Yep, most of them work fine.
> I took one apart once at the mag-mount
> The one I took apart had a thin plate between the magnet and the car which
> was soldered to the braid.
> The capacitive coupling worked fine for 2meters and 10 meters.
> I haven't tried a mag-mount for lower freqs - so I can't address those.

Hal, the USCG authorizes the USCG Auxiliary to use land-mobile radios on VHF-Marine band. This is commonly accomplished with amateur radio antennas cut for 2 mtr, and even without modification they do a fair job for 5-10 miles using the standard mag-mount design. The radio is typically a standard VHF-Marine unit with 25w output. With the antenna trimmed for the lower end of the Marine band they of course perform a litttle better. I had one occassion to try an alternative to the standard car roof mount last summer. I was stationed on the Chesapeake Bay Bridge Tunnel for an activity taking place, and had a standard Shakespeare coil-loaded 5' marine antenna on the roof of the SUV. It's performance was "poor". When I grounded the antenna to a piece of bridge railing (the bridge at that point between islands was about 4 miles long) the rx & tx improved notably. This extended the range that I was copied loud and clear from 5 miles to over 15 miles. Overall, a typical mag-mount antenna would probably have equaled if not outperformed it. Then again the marine antennas were not designed for car-roof mounting.

Jack Painter
Virginia Beach VA

1232. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 14:19:27 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <V3sPc.473$73.296@lakeread04>
Source record: 91503

I helped a friend put one up. The "elements" are just hollow fiberglass tubes that the copper tape runs inside. To remove an element, you just retract the tape, then unscrew the element from the boom. They are very light and easy to handle. So, you don't need to move the placement to get then out of the way.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:410d525e@news.vo.lu...
> Hi
>
> One of my friend come home with a fine question.
> He is in the process to buy a new beam and found Steppir quite interesting
> due to its auto adjusting without moving the elements (all tuning per band
> is made inside the tubes in winding up a copper strap).
>
> Question to Steppir users as I am not sure of the answer:
>
> Is the separation between parasitic elements important as, in all cases,
> there is an adjustment on each band ?
> We ask for the question because we would like to move the central element
of
> a 3-ele steppir multiband beam of about 50 cm to the right /left in order
to
> be able to take the antenna down to the ground (around the pylon). Up to
now
> the central element is in the passage. A way should be to me it slightly
to
> the L or R...
>
> Is it possible or not without changing the performance (mainly SWR) of the
> Steppir ?
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>

1233. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 14:49:13 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <ivksg01fu8t76es6runem1nc8hrugqsbqu@4ax.com>
Source record: 91504

On Mon, 2 Aug 2004 00:50:18 +0200, "Thierry" <to answer direct see
http://www.astrosurf.com/lombry/post.htm> wrote:

>"Green Hornet" <GH@comic.net> wrote in message
>news:FkdPc.3006$wz.253@fed1read01...
>> Have you read "The Tower"
>> http://www.speroni.com/Tower.html
>>
>
>One more human mistake... an incredible one indeed !
>
>It reminds me Tex Avery's Coyote who could not do better ;-)
>
>Thierry
>
Actually, this is a modernized version of an Irish song called "Why
Paddy Cannot be at Work Today". Performed by the Chieftans, amongst a
number of groups.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1234. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 15:05:09 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10gsm1fbm4or731@corp.supernews.com>
Source record: 91505

I remember hearing a recording of Gerard Hoffnung (of "Hoffnung Music Festival" fame -- including such gems as "Haydn's 'Surprise' Symphony [with Additional Surprises]" and an operatic version of th "Sleep Sweeter, BournVita" jingle) telling a version of this story more than 40 years ago (pre-Chieftans, I'm willing to bet) about a bricklayer with a barrel-load of leftover bricks after working at the top of some structure or other.

Alan NV8A

On 08/02/04 10:49 am Gary S. put fingers to keyboard and launched the following message into cyberspace:

> Actually, this is a modernized version of an Irish song called "Why
> Paddy Cannot be at Work Today". Performed by the Chieftans, amongst a
> number of groups.

1235. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 15:46:14 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <a8CdnZBmxYRR_JPcRVn-oQ@adelphia.com>
Source record: 91506

"Green Hornet" <GH@comic.net> wrote in message
news:AUrPc.3059$wz.2932@fed1read01...
> It is humor me lads -- humor
>
> --
> El Hornet Verde
> -----------------
> "David G. Nagel" <nagel@core.com> wrote in message
> news:10gr5f4ppe21a63@corp.supernews.com...
> > Thierry wrote:
> > > "Green Hornet" <GH@comic.net> wrote in message
> > > news:FkdPc.3006$wz.253@fed1read01...
> > >
> > >>Have you read "The Tower"
> > >>http://www.speroni.com/Tower.html
> > >>
> > >
> > >
> > > One more human mistake... an incredible one indeed !
> > >
> > > It reminds me Tex Avery's Coyote who could not do better ;-)
> > >
> > > Thierry
> > >
> > >
> > >>--
> > >>El Hornet Verde
> > >>
> > >>
> > >
> > >
> > >
> > I beleive that the "Mythbusters" TV show demonstrated that this could
> > not happen.
> >
> > Dave WD9BDZ
> >
>

the funny story has been around a long time including versions that the
idiot was a mason.

what gives the story a believable element is that every ham radio club i
know of has one individual who has a propensity for doing idiotic things and

then telling the world all about it :)

1236. Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 16:34:03 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <%1uPc.232806$2o2.12640082@twister.southeast.rr.com>
Source record: 91507

Items involved are solidstate transceiver with fixed output impedance of 50 ohms, 50 ohm feed line and vertical antenna with a feed point impedance of 25 ohms. The one thing that can be varied id feed line length. Should the length be adjusted so the radio sees the 25 ohm impedance or 100 ohms impedance or something in between. OK I will go ahead and admit it, this is for a CB in the camper. Dont get road condition reports on 2 meters.

1237. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 16:55:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7cssg0d6me46ihlnb64bk0q2ihar4q6huo@4ax.com>
Source record: 91508
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Mon, 02 Aug 2004 06:42:47 -0700, Frank Gilliland
<sparky@NOSPAMaimcomm.net> wrote:
>Now anyone can draw their own conclusions from these tests, but IMO
>they serve to reinforce my previous conclusion that mag-mount antennas
>work by using the coax as the ground, -not- any capacitive coupling at
>the base. The capacitance at the base may contribute to the ground
>when the coax isn't resonant, but only minimally.
>
>Thanks for the idea, Richard.

Hi Frank,

You are welcome.

73's
Richard Clark, KB7QHC

1238. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 17:24:34 UTC
From: John Larkin <jjlarkin@highSNIPlandTHIStechPLEASEnology.com>
Message-ID: <chtsg09k89tm4daotrd79jme6fp4v6liqg@4ax.com>
Source record: 91509
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 12:03:31 +0100, John Woodgate
<jmw@jmwa.demon.contraspam.yuk> wrote:

>I read in sci.electronics.design that John Larkin <jjlarkin@highSNIPland
>THIStechPLEASEnology.com> wrote (in <hhklg0d1e3fecafd6umjb9sq7g7retbqu7@
>4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on Fri,
>30 Jul 2004:
>>A universal
>>conversion program would be nice, espacially if it included equivalent
>>reactance, capacitance, inductance, stuff like that.
>
>It might be nice, but it's dumbing down the subject, and anyone using s-
>parameters for real had better *understand* what he/she is doing,
>otherwise any success would be a pure fluke.

I work mostly in time domain, so I need to convert s-params into
lumped device models, and it would be nice to have some software
(affordable software!) that does that. That's not really "dumbing
down" to me... it's the s-params that are dumb simplifications!

One trick I use is to visually estimate fet input and output
capacitances to see if a device is worth closer inspection. Just run
eyeballs down the S11 angle column and estimate the frequency (in Ghz)
where the angle hits 40 degrees. The reciprocal is Cin in pF. Ditto
S22 for output capacitance.

John

1239. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 17:26:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8jtsg09okd873vq1lrhrnpd1qu5cl7tshm@4ax.com>
Source record: 91510

On Mon, 2 Aug 2004 11:17:34 -0000, "Dave" <noone@nowhere.com> wrote:

>personally i rather like that
>theory, but apparently it doesn't fit all the observations.

Hi Dave,

So much of those "early" observations abstracted to today are spun from wishes and dreams born of boredom. 100 years ago when scientists were trying to measure the transit time of Venus across the face of the sun, they ran into rather simple problems that taxed their limits of accuracy. The claims of how older studies obtained MORE accuracy with MORE limitations border on the ridiculous.

The theory as it stands in accredited scientific studies could easily account for a change in the speed; however, when those results don't fit the pre-conceived notions of a biblical time-line, we are indulged with a lot of fudging to force fit curves into a secant-squared (?) shape? Such imaginings that the speed of light has only now stabilized for us are narcissistic in the extreme.

73's
Richard Clark, KB7QHC

1240. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 17:27:08 UTC
From: Chris <REMOVEchris1379ME@bigfoot.com>
Message-ID: <MPuPc.6301$cK.5358@newsread2.news.pas.earthlink.net>
Source record: 91511
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

I have an MFJ Goliath trimount with 3 five inch magnets. It ain't goin' nowhere!

Chris
"Leland C. Scott" <kc8ldo@arrl.net> wrote in message
news:sJydnY25fe1FzZDcRVn-vg@comcast.com...
|
| "I ain't George either" <KennelMaster@not-here.com> wrote in message
| news:GM6Pc.10551$_25.1129@fe2.texas.rr.com...
| >
| > "Leland C. Scott" <kc8ldo@arrl.net> wrote in message
| > news:ZeGdnSRl5JUA45HcRVn-hQ@comcast.com...
| > >
| > > "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
| > > news:jJednec7ptbk1pHcRVn-hg@comcast.com...
| > > > Unless you are using a 1/4 wave VHF antenna, make sure it has a strong
| > > > magnet, or magnets. I had a 5/8 wave 2m antenna on a name brand mag
| > mount
| > > > blow off the roof.
| > >
| > > MFJ?
|
| That's what I asked.
|
| --
| Leland C. Scott
| KC8LDO
|
| Wireless Network
| Mobile computing
| on the go brought
| to you by Micro$oft
|
|

1241. Re: a gin-pole breaking...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 17:28:13 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <zt0QmgBtmnDBFAjF@ifwtech.co.uk>
Source record: 91513

NV8A wrote:
>I remember hearing a recording of Gerard Hoffnung (of "Hoffnung Music
>Festival" fame -- including such gems as "Haydn's 'Surprise' Symphony
>[with Additional Surprises]" and an operatic version of th "Sleep
>Sweeter, BournVita" jingle) telling a version of this story more than
>40 years ago (pre-Chieftans, I'm willing to bet) about a bricklayer
>with a barrel-load of leftover bricks after working at the top of some
>structure or other.
>
>Alan NV8A
>
>
>On 08/02/04 10:49 am Gary S. put fingers to keyboard and launched the
>following message into cyberspace:
>
>> Actually, this is a modernized version of an Irish song called "Why
>> Paddy Cannot be at Work Today". Performed by the Chieftans, amongst a
>> number of groups.

That would have been the Dubliners - the Chieftains don't sing.

Alan comes closest - full details are at:
http://www.lesession.co.uk/umf/umf_faq.htm#hoffnung
http://www.monologues.co.uk/Bricklayers_Story.htm

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1242. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 17:38:25 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <410E7C11.BB6B9E64@uci.edu>
Source record: 91512

Cecil Moore wrote:

> The relativistic effects affect all watches. However,
> the time drift can be observed by comparing atomic
> clocks to Bristlecone Pine rings - they don't match.
> The farther back in time they are compared, the farther
> apart they appear to be in time.

How do we know that it's not due simply to a change in the period of
the Earth's orbit around the Sun?

73, Jim AC6XG

1243. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 17:58:46 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <560tg01lb31vuq865aljdjomqfjhff1e19@4ax.com>
Source record: 91514
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Mon, 02 Aug 2004 10:24:34 -0700, John Larkin
<jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:

>On Sat, 31 Jul 2004 12:03:31 +0100, John Woodgate
><jmw@jmwa.demon.contraspam.yuk> wrote:
>
>>I read in sci.electronics.design that John Larkin <jjlarkin@highSNIPland
>>THIStechPLEASEnology.com> wrote (in <hhklg0d1e3fecafd6umjb9sq7g7retbqu7@
>>4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on Fri,
>>30 Jul 2004:
>>>A universal
>>>conversion program would be nice, espacially if it included equivalent
>>>reactance, capacitance, inductance, stuff like that.
>>
>>It might be nice, but it's dumbing down the subject, and anyone using s-
>>parameters for real had better *understand* what he/she is doing,
>>otherwise any success would be a pure fluke.
>
>I work mostly in time domain, so I need to convert s-params into
>lumped device models, and it would be nice to have some software
>(affordable software!) that does that. That's not really "dumbing
>down" to me... it's the s-params that are dumb simplifications!
>
>One trick I use is to visually estimate fet input and output
>capacitances to see if a device is worth closer inspection. Just run
>eyeballs down the S11 angle column and estimate the frequency (in Ghz)
>where the angle hits 40 degrees. The reciprocal is Cin in pF. Ditto
>S22 for output capacitance.
>
>John
>

40 degrees ???

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(480)460-2350	
E-mail Address at Website Fax:(480)460-2142	Brass Rat
http://www.analog-innovations.com	1962

I love to cook with wine. Sometimes I even put it in the food.

1244. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 18:58:01 UTC
From: "paulfriedman@comcast.net" <p.paulfriedman@comcast.net>
Message-ID: <Y8wPc.217810$JR4.14615@attbi_s54>
Source record: 91515

The Earth goes around the sun? Impossible, that is not what the Bible says.

Paul AB0SI

"Jim Kelley" <jwkelley@uci.edu> wrote in message news:410E7C11.BB6B9E64@uci.edu...
>
>
> Cecil Moore wrote:
>
> > The relativistic effects affect all watches. However,
> > the time drift can be observed by comparing atomic
> > clocks to Bristlecone Pine rings - they don't match.
> > The farther back in time they are compared, the farther
> > apart they appear to be in time.
>
> How do we know that it's not due simply to a change in the period of
> the Earth's orbit around the Sun?
>
> 73, Jim AC6XG

1245. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:05:48 UTC
From: j999w@aol.com
Message-ID: <20040802150548.00667.00000857@mb-m03.aol.com>
Source record: 91516

What's the SWR that the radio is seeing as it is now?

jw
k9rzz

1246. Re: mylar properties ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:08:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410e9262$1_4@corp.newsgroups.com>
Source record: 91517

JJ wrote:
> Will mylar work to reflect 2.4g radio waves ?

Mylar is non-conductive. What you need is
metalized mylar.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1247. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:22:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410e95a6_4@corp.newsgroups.com>
Source record: 91518

Jim Kelley wrote:

> Cecil Moore wrote:
>>The relativistic effects affect all watches. However,
>>the time drift can be observed by comparing atomic
>>clocks to Bristlecone Pine rings - they don't match.
>>The farther back in time they are compared, the farther
>>apart they appear to be in time.
>
> How do we know that it's not due simply to a change in the period of
> the Earth's orbit around the Sun?

Is there any evidence that the period of Earth's orbit has changed
in the past 7000 years? - in the past 2000 years? The spread between
carbon dating and Bristlecone Pine rings is a continuous function of
time so any evidence should be detectable over only a few years.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1248. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:28:35 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <2Ke4UcGjXpDBFwQ+@jmwa.demon.co.uk>
Source record: 91520
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that Jim Thompson
<thegreatone@example.com> wrote (in <560tg01lb31vuq865aljdjomqfjhff1e19@
4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on Mon, 2
Aug 2004:

>40 degrees ???

It's obviously a mathematical ruse, depending on cos(40) or tan(40) or
something like that (like tan(17.4) = 0.1*pi, nearly). I tried to
reverse-mathematic it, but my brane 'urts. (;-)
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1249. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:30:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7s4tg01ag58rfh56ot18f772aigtdq4h5l@4ax.com>
Source record: 91519
Body handling: HTML body converted to readable text

On Mon, 02 Aug 2004 18:58:01 GMT, "paulfriedman@comcast.net"
wrote:

>The Earth goes around the sun? Impossible, that is not what the Bible
>says.
>
Hi Paul,

What is more, no one has actually SEEN the earth go around the sun.
We might presume the opposite, if faith allowed that when the sun set
in the west, it was in fact the same sun that appeared in the east.

This leads to another test of faith. The speed of light (or time) has
changed 1.16% since the first reported "measurement" some 260 years
ago. The years were short back then? Hard to imagine anyone would
miss a difference of 4 days.

If we are talking about solar orbits, the test of faith becomes
enormous back in Methuselah's day when the year was roughly 6 weeks
long (or is it the weeks were 30 hours long? Or is it the hours were
6 minutes long then?). Anyway, we would have had to have been in an
orbit inside of Mercury's to make that all come out in the wash. Hard
to imagine no one's noticed (and harder yet to have had any ice ages).

73's
Richard Clark, KB7QHC

1250. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:37:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dk5tg01ro6sjnf5b2th65i8mvqsavhn2rm@4ax.com>
Source record: 91521

On Mon, 02 Aug 2004 16:34:03 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:
>The one thing that can be varied id feed line length.

Hi Jimmie,

If that is all you can vary, skip it. No one is going to notice any
difference no matter how long or short you make it. If the SWR
concerns you, add 150 feet of RG-58 and you won't measure that SWR at
the transmitter.

73's
Richard Clark, KB7QHC

1251. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:41:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410e9a30$1_4@corp.newsgroups.com>
Source record: 91523

paulfriedman@comcast.net wrote:
> The Earth goes around the sun? Impossible, that is not what the Bible
> says.

Ever wonder how the plants and trees, created on the third day,
survived until the fourth day when the sun was created?

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1252. Re: Modling a coil

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:42:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <746tg0df11n5ovhc46bmqvm57v1516ibla@4ax.com>
Source record: 91522

On Sat, 31 Jul 2004 20:05:52 -0700, rlangevin@interwrx.com wrote:

>I want to model this thing using eznec demo but I
>don't know how to input the coils.

Hi Rich,

Use the online Help manual and read up on adding loads to your simple
vertical design.

73's
Richard Clark, KB7QHC

1253. Vertical - quick & dirty

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:58:44 UTC
From: krt2054@charter.net
Message-ID: <33d49c4.0408021158.7e19aa44@posting.google.com>
Source record: 91524

I need a temporary quick and dirty antenna for 15m and 20m. I can easily set up a vertical length of PVC plumbing pipe on the ground and bottom feed it. Essentially a bottom fed 1/4 wavelength vertical. I intend to use a galvanized screen material, 1/4" square holes, as the ground plane, lying on the physical Earth ground. Probably about 6 x 6 feet. I do have an antenna tuner. May transmitter output is 100W maximum. Feed line is long, about 75 feet.

Questions:

1. I am going to use a copper clad, steel stranded wire and place it * inside * the PVC pipe. OK? Or would I be advised to string it outside the pipe?

2. In order to shorten the vertical PVC pipe can I helically wrap the radiating element around the PVC pipe? (outside, of course ;-))

3. Does the ground plane screen need to be grounded, to Earth ground?

Thanks.

Thomas

1254. Re: Vertical - quick & dirty

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 19:59:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410e9e6b$1_4@corp.newsgroups.com>
Source record: 91526

Thomas wrote:
> I need a temporary quick and dirty antenna for 15m and 20m.

Instead of PVC pipe, you might want to consider a South Bend
SD-20 (ft) fishing pole that collapses to 4 ft total length.
Works well for me.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1255. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:02:44 UTC
From: jgboyles@aol.com
Message-ID: <20040802160244.19122.00002890@mb-m06.aol.com>
Source record: 91525

>The one thing that can be varied id feed line length. Should the
>length be adjusted so the radio sees the 25 ohm impedance or 100 ohms
>impedance or something in between.

If the impedance at the antenna is actually 25+j0 ohms, the varying the length of the line will not change the SWR the transmitter sees. The 2:1 SWR the transmitters sees is however not that big a deal.
You could do this: run I meter of RG58 from the antenna. Stick an 82pf capacitor across the coax at the end of the 1 meter of cable. The impedance at this point is near 50 ohms. Attach as much 50 ohm coax at this point as needed to get to your rig. Instead of a capacitor you could use an open ended stub made of 1 meter of RG58. Does the same thing as the capacitor.

73 Gary N4AST

1256. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:24:43 UTC
From: John Larkin <jjlarkin@highSNIPlandTHIStechPLEASEnology.com>
Message-ID: <in8tg092ei8n5qg4fi3i600iaviq6mtlu8@4ax.com>
Source record: 91527
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Mon, 02 Aug 2004 10:58:46 -0700, Jim Thompson
<thegreatone@example.com> wrote:

>On Mon, 02 Aug 2004 10:24:34 -0700, John Larkin
><jjlarkin@highSNIPlandTHIStechPLEASEnology.com> wrote:
>
>>On Sat, 31 Jul 2004 12:03:31 +0100, John Woodgate
>><jmw@jmwa.demon.contraspam.yuk> wrote:
>>
>>>I read in sci.electronics.design that John Larkin <jjlarkin@highSNIPland
>>>THIStechPLEASEnology.com> wrote (in <hhklg0d1e3fecafd6umjb9sq7g7retbqu7@
>>>4ax.com>) about 'S - Y Parameter conversion with Smith Chart', on Fri,
>>>30 Jul 2004:
>>>>A universal
>>>>conversion program would be nice, espacially if it included equivalent
>>>>reactance, capacitance, inductance, stuff like that.
>>>
>>>It might be nice, but it's dumbing down the subject, and anyone using s-
>>>parameters for real had better *understand* what he/she is doing,
>>>otherwise any success would be a pure fluke.
>>
>>I work mostly in time domain, so I need to convert s-params into
>>lumped device models, and it would be nice to have some software
>>(affordable software!) that does that. That's not really "dumbing
>>down" to me... it's the s-params that are dumb simplifications!
>>
>>One trick I use is to visually estimate fet input and output
>>capacitances to see if a device is worth closer inspection. Just run
>>eyeballs down the S11 angle column and estimate the frequency (in Ghz)
>>where the angle hits 40 degrees. The reciprocal is Cin in pF. Ditto
>>S22 for output capacitance.
>>
>>John
>>
>
>40 degrees ???
>
> ...Jim Thompson

-38.5, if you want to get pickey.

John

1257. Re: Vertical - quick & dirty

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:37:26 UTC
From: jgboyles@aol.com
Message-ID: <20040802163726.19122.00002892@mb-m06.aol.com>
Source record: 91528

>1. I am going to use a copper clad, steel stranded wire and place it *
>inside * the PVC pipe. OK? Or would I be advised to string it
>outside the pipe?

Probably be easier to run the wire outside the pvc and secure with plastic wire ties.

> In order to shorten the vertical PVC pipe can I helically wrap the
>radiating element around the PVC pipe? (outside, of course ;-))

Yes, within reason, I would do a fairly loose helix.

>Does the ground plane screen need to be grounded, to Earth ground?

If it is a very LARGE ground screen there may will be enough capacitive coupling to ground. If not, then you will reduce ground losses by grounding.

If you intend to use the vertical on 20 and 15, you will need to feed it with low loss feedline and use your antenna tuner.

73 Gary N4AST

1258. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:41:40 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <410EA704.6040806@psu.edu>
Source record: 91530

Cecil Moore wrote:
> paulfriedman@comcast.net wrote:
>
>> The Earth goes around the sun? Impossible, that is not what the Bible
>> says.
>
>
> Ever wonder how the plants and trees, created on the third day,
> survived until the fourth day when the sun was created?

Oh heck Cecil, it was only one day in the dark! ;^)

- Mike KB3EIA -

1259. Re: Vertical - quick & dirty

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:43:39 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2n7nihFt0bokU1@uni-berlin.de>
Source record: 91529

I suggest that you put a short length of the pipe
in your microwave oven, together with a glass of water.
Heat on high for a few seconds.

If the pipe is warm, then put the wire outside the pipe.

The ground plane does not need to be in contact with the
ground, although a safety earth spike is a good idea.

"Thomas" <krt2054@charter.net> wrote in message
news:33d49c4.0408021158.7e19aa44@posting.google.com...
> I need a temporary quick and dirty antenna for 15m and 20m. I can
> easily set up a vertical length of PVC plumbing pipe on the ground
> and bottom feed it. Essentially a bottom fed 1/4 wavelength vertical.
> I intend to use a galvanized screen material, 1/4" square holes, as
> the ground plane, lying on the physical Earth ground. Probably about
> 6 x 6 feet. I do have an antenna tuner. May transmitter output is
> 100W maximum. Feed line is long, about 75 feet.
> 1. I am going to use a copper clad, steel stranded wire and place it *
> inside * the PVC pipe. OK? Or would I be advised to string it
> outside the pipe?
> 2. In order to shorten the vertical PVC pipe can I helically wrap the
> radiating element around the PVC pipe? (outside, of course ;-))
> 3. Does the ground plane screen need to be grounded, to Earth ground?

1260. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:47:04 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <410EA848.5040209@psu.edu>
Source record: 91531

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>
>> If true, virtually all aspects of traditional physics are affected,
>> including
>> the presumed steady state of radioactive decay used to measure
>> geologic time.
>
>
> Yuri, did you know there is a drift between radioactive decay and the rings
> of the Bristlecone Pine that increases with time passed? IMO, that drift is
> the effect of seconds getting shorter as the universe ages. Proof is that I
> once could run 100 yards in 12 seconds. Now, since seconds are shorter, it
> takes me twice as many seconds to cover 100 yards. :-)

Actually that is evidence for one theory (likely fact) that days are getting longer. I sat in on a fascinating presentation by a paleontologist regarding the possibility of a fossil record of this. Seems that shelly animals today actually have micro growth rings that happen on a daily basis. Some fossils have what *appear* to be such a thing, but he is being cautious before suggesting such.

1261. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 20:58:47 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <410EAB07.8070105@psu.edu>
Source record: 91532

Yuri Blanarovich wrote:
> Interesting article at
> http://www.freerepublic.com/focus/news/1182979/posts?page=22
> so much for my 300,000 km/s "constant" :-(
>
> extract:
>
>>>The theory is deceptively simple: The speed of light is not constant, as
>>
> we've been taught since the early 1930s, but has been steadily slowing since
> the first instance of time.
>
> If true, virtually all aspects of traditional physics are affected, including
> the presumed steady state of radioactive decay used to measure geologic time.
>
> It's an intriguing story – and like many revolutions in science, it begins
> with observations that just don't fit currently accepted scientific dogma. <<

So the fundamentalist creationists try to find "evidence" to fit their preconceived faithnotion.

Why do fundies accuse scientists of Dogmatic thinking when they demand unquestioning adherence to what they proclaim to be true - and all this under threat of everlasting condemnation in what amounts to an eternity of torture and pain.

Haven't heard any scientists making similar "offers".

Finally, if that is intriguing:

Assuming that the great biblical flood happened *exactly* as written in the Bible:

How much water did it take to cover mount Everest with say a foot of water. Assume that the rate of height gain per year was the same at that time.

Even without the calculations, that is one great galloping lot of water.

Where did the water in the great flood come from?

Where did the water in great flood go to?

Finally, did the Kangaroos and other animals in Australia swim to the middle east to get on Noah's ark so they wouldn't drown when the flood came?

- mike -

1262. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 21:02:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <410EABEE.87084FE9@uci.edu>
Source record: 91535

Cecil Moore wrote:
> Is there any evidence that the period of Earth's orbit has changed
> in the past 7000 years? - in the past 2000 years?

Perhaps. I hear bristlecone pine rings have changed. Presumably
they're an indicator of the length of a year. Some say that means that
the length of a second has changed. Others might claim it simply means
the kinematics of Earths orbit have changed. :-)

How ya doin', Cecil?

73, AC6XG

1263. Re: Capacitor loaded vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 21:04:46 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0408021304.e11d9aa@posting.google.com>
Source record: 91533

Jon these same parts are already in your radio tuner
or separate tuner. The capacitors are controlled by a
microcontroller in the tuner.
There is no reason why you should not put these same
parts into your antenna and control them using your
present automatic control in the shack as you change
frequency.
Art

Jon" <jon@portlandbill.co.uk> wrote in message news:<cehc3u$do8$1@news6.svr.pol.co.uk>...
> At present I am designing a 40m centre loaded vertical from an old
> fibreglass cb antenna about 18' long. I plan to use a single counterpoise of
> the same dimensions and loaded at the same point and sloping down from the
> antenna, a loaded vertical dipole if you like. Nothing new here I hear you
> say but I am planning to add two motor driven variable capacitors to the
> feedpoint, one in the vertical and one in the counterpoise to resonate the
> antenna on the bands between 40 and 10m. I can't find anything in my books
> or on the net relating to shrotening antennas using capacitors. I have used
> this technique before sucessfully in a vertical for 20-10m with tuned
> radials for QRP.
>
> I wonder if anyone would like to have a think about it and maybe suggest a
> good starting point as to capacitor value for use with 100W. I have tried
> and failed to use antenna modelling software before so this is not an option
> for me.
>
> Thanks in advance.
>
> Jon G2FHF

1264. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 21:09:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <28btg0t21j31fuip8g7d9i1k32et354e7b@4ax.com>
Source record: 91534

On Mon, 02 Aug 2004 16:41:40 -0400, Mike Coslo <mjc5remove@psu.edu>
wrote:

> Oh heck Cecil, it was only one day in the dark! ;^)
And all of what, 15 femtoseconds?

1265. Re: Capacitor loaded vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 21:21:23 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cemb8k$2dj$1@newsg1.svr.pol.co.uk>
Source record: 91536

Good idea Art, but at present I only have an FT817 and 706 IIG, both with no tuners. I have plenty of homebrew ATU's, I could make the antenna just for 40m and feed it with open wire and use a tuner. I just like to experiment, I don't need the thing I just like to be different and to see if I can do the job as well as the commercial guys. I guess I could use two radiating elements, one cut for 40m and one for 20m. It would probably increase efficiency.

As for my radio gear, I am soon to order an Elecraft K2-100 so am looking forward to building that.

Jon G2FHF
"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0408021304.e11d9aa@posting.google.com...
> Jon these same parts are already in your radio tuner
> or separate tuner. The capacitors are controlled by a
> microcontroller in the tuner.
> There is no reason why you should not put these same
> parts into your antenna and control them using your
> present automatic control in the shack as you change
> frequency.
> Art
>
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>
> Jon" <jon@portlandbill.co.uk> wrote in message
news:<cehc3u$do8$1@news6.svr.pol.co.uk>...
> > At present I am designing a 40m centre loaded vertical from an old
> > fibreglass cb antenna about 18' long. I plan to use a single
counterpoise of
> > the same dimensions and loaded at the same point and sloping down from
the
> > antenna, a loaded vertical dipole if you like. Nothing new here I hear
you
> > say but I am planning to add two motor driven variable capacitors to the
> > feedpoint, one in the vertical and one in the counterpoise to resonate
the
> > antenna on the bands between 40 and 10m. I can't find anything in my
books

> > or on the net relating to shrotening antennas using capacitors. I have
used
> > this technique before sucessfully in a vertical for 20-10m with tuned
> > radials for QRP.
> >
> > I wonder if anyone would like to have a think about it and maybe suggest
a
> > good starting point as to capacitor value for use with 100W. I have
tried
> > and failed to use antenna modelling software before so this is not an
option
> > for me.
> >
> > Thanks in advance.
> >
> > Jon G2FHF

1266. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 21:53:06 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0408021353.243db880@posting.google.com>
Source record: 91537

fractenna@aol.com (Fractenna) wrote in message
news:<20040731081904.04588.00002232@mb-m10.aol.com>...
> Mr. Robert Vincent's/ University of Rhode island (URI) "revolutionary, new"
> DLM antenna technology has experienced some public informational updates. In
> particular, I suggest the following URL:
>
> http://www.uri.edu/research/tro/NCD_for_Tape,_040604.html
>
> As I have stated previously, I am of the opinion that the issue of 'new' and
> 'revolutionary' may not be accurate when considering the prior art relative to
> Mr. Vincents' 'DLM antenna technology'.
Snip
What bothers me Chip about declaration of a new antenna is that it is
immediatly laughed at purely because of many past claims that did not
turn out.Thus the thinking that all is known.
There are many things that have not been tried by ham radio operators
so why negative thinking without knowing what the gentleman has done,
you have probably been down this road of thinking yourself.
For instance, there was reference to distributed loads used on a
vertical
which provided various changes to the norm. What is so wrong about
declaring this idea especialy when it is a novel aproach to the use of
distributed loads? Has anybody made such an arrangement, if not you
will
be surprised
Try modeling a spiral coil as a distributed load, first you model half
of
a spiral and attach it to a vertical. At the top of this vertical you
attach a half of a spiral and at the bottom attach another half spiral
and so on.
Thus you have verticals of different lengths each coupled to each
other
with a distributed load which are arranged at different heights
If you haven't heard of this being done would you knock it?
It is to my mind revolutionary in that it transforms a coil that
radiates
into a cluster with distributed loads of a spiral but without the same
mutual coupling of a spiral and replaced with a different coupling.
Remember when one says a shorter vertical with better results it
does NOT necessarilly mean that the electrical length of the radiator
is SHORTER.
So if the inventor say, did the above would it not be revolutionary ?
And can you categorically say his claims are untrue until one
personally

takes the time and models it. Frankly I feel that many would be
surprised if they talked the talk and modelled such a thing instead
of
using the easy road in modelling by using lumped loads which negates
the actual effects of coupling. (But then the term coupling does
upset a lot
of some antenna gurus on this newsgroup)
Regards
Art

1267. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 22:43:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cogtg0h5i7doe5eo2ru95ebvco8fe1g3bq@4ax.com>
Source record: 91538

On 2 Aug 2004 14:53:06 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:

>Frankly I feel that many would be
> surprised if they talked the talk and modelled such a thing

Hi Art,

What are your results? Care to share your model?

73's
Richard Clark, KB7QHC

1268. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:13:40 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <EUzPc.233673$2o2.12718900@twister.southeast.rr.com>
Source record: 91539

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040802160244.19122.00002890@mb-m06.aol.com...
> >The one thing that can be varied id feed line length. Should the
> >length be adjusted so the radio sees the 25 ohm impedance or 100 ohms
> >impedance or something in between.
>
> If the impedance at the antenna is actually 25+j0 ohms, the varying the
> length of the line will not change the SWR the transmitter sees. The 2:1
SWR
> the transmitters sees is however not that big a deal.
> You could do this: run I meter of RG58 from the antenna. Stick an 82pf
> capacitor across the coax at the end of the 1 meter of cable. The
impedance at
> this point is near 50 ohms. Attach as much 50 ohm coax at this point as
needed
> to get to your rig. Instead of a capacitor you could use an open ended
stub
> made of 1 meter of RG58. Does the same thing as the capacitor.
>
> 73 Gary N4AST
I didnt want to do a whole lot to the rig such as making stubs as the thing
will not be used that much and it would be a royal pain to get to the base
of the antenna. Yes I know line length will not effect SWR. I was concerned
whether the lower or higher impedance may effect other things such as
modulation since this is an AM transmitter with the last two stages
modulated. Last time I messed with a CB loading was adjustable and this
would have not be a question. I was thinking maybe it would be better to
underload the TX with 100 ohms than overload with 25.

1269. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:16:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410ecc74$1_1@corp.newsgroups.com>
Source record: 91540

Mike Coslo wrote:
> Cecil Moore wrote:
>> Ever wonder how the plants and trees, created on the third day,
>> survived until the fourth day when the sun was created?
>
> Oh heck Cecil, it was only one day in the dark! ;^)

Ever wonder how long a day was before the sun was created? :-)

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1270. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:22:18 UTC
From: jgboyles@aol.com
Message-ID: <20040802192218.19122.00002904@mb-m06.aol.com>
Source record: 91541

> I was concerned
>whether the lower or higher impedance may effect other things such as
>modulation since this is an AM transmitter with the last two stages
>modulated.

>I was thinking maybe it would be better to
>underload the TX with 100 ohms than overload with 25.
With CB it is 6 of one and half dozen of another, it really makes no
difference.

73 Gary N4AST

1271. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:24:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410ece54$1_1@corp.newsgroups.com>
Source record: 91542

Mike Coslo wrote:
> Where did the water in the great flood come from?

Look up "Black Sea Flood". It came from the Mediterranean Sea.

> Where did the water in great flood go to?

Nowhere. It's still there in the Black Sea. "Gilgamesh's
flood" predates The Bible by a considerable number of years.

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1272. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:28:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410ecf52_1@corp.newsgroups.com>
Source record: 91543

Jim Kelley wrote:
> Others might claim it simply means
> the kinematics of Earths orbit have changed. :-)

Without any evidence? Stone Henge apparently still works.

> How ya doin', Cecil?

If I could reverse the aging process, I would be doing a lot
better. H&H are giving me fits.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1273. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:34:38 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <icAPc.198143$a24.890@attbi_s03>
Source record: 91544

Why on earth would I do that Richard ?
If you want something to kick around buy yourself a soccer ball.
Since you know everything tell the group in your fractured english
what to expect from such an arrangement
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:cogtg0h5i7doe5eo2ru95ebvco8fe1g3bq@4ax.com...
> On 2 Aug 2004 14:53:06 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
>
> >Frankly I feel that many would be
> > surprised if they talked the talk and modelled such a thing
>
> Hi Art,
>
> What are your results? Care to share your model?
>
> 73's
> Richard Clark, KB7QHC

1274. Re: Capacitor loaded vertical question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:44:57 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <ZIAPc.203088$IQ4.60476@attbi_s02>
Source record: 91545

Well it does give you the values of components immediately and ensures the
antenna
will alway present a 50 ohm load to the radio and at the antenna input
regardles of frequency
and is large enough for a 100 watt input.I have used this method with an
antenna with a bandwidth of 5Khz
where the bandwidth moved with frequency change.
Really helps when you are alongside heavy broadcast signals on top band
where it preserves the noise floor
of the receiver.
Good luck with the experimenting
Art

"Jon" <jon@portlandbill.co.uk> wrote in message
news:cemb8k$2dj$1@newsg1.svr.pol.co.uk...
> Good idea Art, but at present I only have an FT817 and 706 IIG, both with
no
> tuners. I have plenty of homebrew ATU's, I could make the antenna just for
> 40m and feed it with open wire and use a tuner. I just like to experiment,
I
> don't need the thing I just like to be different and to see if I can do
the
> job as well as the commercial guys. I guess I could use two radiating
> elements, one cut for 40m and one for 20m. It would probably increase
> efficiency.
>
> As for my radio gear, I am soon to order an Elecraft K2-100 so am looking
> forward to building that.
>
> Jon G2FHF
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0408021304.e11d9aa@posting.google.com...
> > Jon these same parts are already in your radio tuner
> > or separate tuner. The capacitors are controlled by a
> > microcontroller in the tuner.
> > There is no reason why you should not put these same
> > parts into your antenna and control them using your
> > present automatic control in the shack as you change
> > frequency.
> > Art
> >
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> > Jon" <jon@portlandbill.co.uk> wrote in message
> news:<cehc3u$do8$1@news6.svr.pol.co.uk>...
> > > At present I am designing a 40m centre loaded vertical from an old
> > > fibreglass cb antenna about 18' long. I plan to use a single
> counterpoise of
> > > the same dimensions and loaded at the same point and sloping down from
> the
> > > antenna, a loaded vertical dipole if you like. Nothing new here I hear
> you
> > > say but I am planning to add two motor driven variable capacitors to
the
> > > feedpoint, one in the vertical and one in the counterpoise to resonate
> the
> > > antenna on the bands between 40 and 10m. I can't find anything in my
> books
> > > or on the net relating to shrotening antennas using capacitors. I have
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> > > this technique before sucessfully in a vertical for 20-10m with tuned
> > > radials for QRP.
> > >
> > > I wonder if anyone would like to have a think about it and maybe
suggest
> a
> > > good starting point as to capacitor value for use with 100W. I have
> tried
> > > and failed to use antenna modelling software before so this is not an
> option
> > > for me.
> > >
> > > Thanks in advance.
> > >
> > > Jon G2FHF
> >
>

1275. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:45:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t8ktg0tvmbgr4p3iq2ma0sttq2ph6nm91q@4ax.com>
Source record: 91546

On Mon, 02 Aug 2004 23:34:38 GMT, "aunwin" <aunwin@insightbb.com>
wrote:

>Why on earth would I do that Richard ?

Because you said
>> >Frankly I feel that many would be
>> > surprised if they talked the talk and modelled such a thing

So, no model?

73's
Richard Clark, KB7QHC

1276. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:52:08 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410ed3ad$1@news.vo.lu>
Source record: 91547

"Craig Buck" <k4ia@cox.net> wrote in message
news:V3sPc.473$73.296@lakeread04...
> I helped a friend put one up. The "elements" are just hollow fiberglass
> tubes that the copper tape runs inside. To remove an element, you just
> retract the tape, then unscrew the element from the boom. They are very
> light and easy to handle. So, you don't need to move the placement to get
> then out of the way.

Mm... No, not this way.
The objective is to let the beam on top of the tower and using the electric
cage to lowering it to the ground
We bought a motorized winch to avoid climbing on the tower.

Thierry

>
> --
> Radio K4ia
> Craig "Buck"
> Fredericksburg, VA USA
> FISTS 6702 cc 788 Diamond 64
> "Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
> wrote in message news:410d525e@news.vo.lu...
> > Hi
> >
> > One of my friend come home with a fine question.
> > He is in the process to buy a new beam and found Steppir quite
interesting
> > due to its auto adjusting without moving the elements (all tuning per
band
> > is made inside the tubes in winding up a copper strap).
> >
> > Question to Steppir users as I am not sure of the answer:
> >
> > Is the separation between parasitic elements important as, in all cases,
> > there is an adjustment on each band ?
> > We ask for the question because we would like to move the central
element
> of
> > a 3-ele steppir multiband beam of about 50 cm to the right /left in
order
> to
> > be able to take the antenna down to the ground (around the pylon). Up to
> now
> > the central element is in the passage. A way should be to me it slightly

> to
> > the L or R...
> >
> > Is it possible or not without changing the performance (mainly SWR) of
the
> > Steppir ?
> >
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry
> >
> >
>
>

1277. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-02 23:52:50 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <410ED3D2.4B5E53AD@uci.edu>
Source record: 91548

Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Others might claim it simply means
> > the kinematics of Earths orbit have changed. :-)
>
> Without any evidence?

What determines the amount of time between winters, Cecil? It could be that the length of a second changed, or the distance the Earth travels in a year changed.
In some ways it amounts to the same thing, don't you agree?

> If I could reverse the aging process, I would be doing a lot
> better. H&H are giving me fits.

Sorry you're bothered with that - whatever it is. Would you mind getting a phone call?

Thanks,

Jim AC6XG

1278. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 00:19:49 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <slednZC2FPe4R5PcRVn-qA@adelphia.com>
Source record: 91549

Jim Kelley wrote:

> Cecil Moore wrote:
>
>>Is there any evidence that the period of Earth's orbit has changed
>>in the past 7000 years? - in the past 2000 years?
>
>
> Perhaps. I hear bristlecone pine rings have changed. Presumably
> they're an indicator of the length of a year. Some say that means that
> the length of a second has changed. Others might claim it simply means
> the kinematics of Earths orbit have changed. :-)

Oy! We could either have the length of the year/day/second changing due to mechanical reasons, or we can have a strange concoction of gobbldegook that not very neatly manages to make one fundamentalist group's idea on the age of the universe miraculously "work out"....

Occam's razor candidate for sure!

- Mike KB3EIA -

1279. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 00:20:48 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <sIednZO2FPfCR5PcRVn-qA@adelphia.com>
Source record: 91550

Cecil Moore wrote:

> Mike Coslo wrote:
>
>> Cecil Moore wrote:
>>
>>> Ever wonder how the plants and trees, created on the third day,
>>> survived until the fourth day when the sun was created?
>>
>>
>> Oh heck Cecil, it was only one day in the dark! ;^)
>
>
> Ever wonder how long a day was before the sun was created? :-)

Hard to say, since it was night! ;^)

- Mike KB3EIA -

1280. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 00:21:52 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <sIednZK2FPcCR5PcRVn-qA@adelphia.com>
Source record: 91551

Cecil Moore wrote:

> Mike Coslo wrote:
>
>> Where did the water in the great flood come from?
>
>
> Look up "Black Sea Flood". It came from the Mediterranean Sea.
>
>> Where did the water in great flood go to?
>
>
> Nowhere. It's still there in the Black Sea. "Gilgamesh's
> flood" predates The Bible by a considerable number of years.

Right, that's how I understand it. But what about the people that know
that the flood covered the entire earth?

- Mike KB3EIA -

1281. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 00:56:28 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <0pBPc.201094$%_6.114303@attbi_s01>
Source record: 91552

As reported it is by definition 2:1.

For mobile CB radio just plug in the antenna & radio and have a go.

A 2:1 VSWR is only a 10% mismatch and most CBs will easily handle [i.e.
not self destruct] at 2:1 VSWR.

J999w wrote:

> What's the SWR that the radio is seeing as it is now?
>
> jw
> k9rzz

1282. Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 01:06:48 UTC
From: t_ashland@yahoo.com
Message-ID: <6e6aeba9.0408021706.73cc662e@posting.google.com>
Source record: 91553

I recently acquired an old Hy-Gain vertical. I don't believe its in the AVQ series. It has 3 traps (marked 10-15-20), and has a 4 spoke top hat. On top of the top hat is what looks like a Hustler vertical with a whip and a large ball on the end of the whip. Any ideas what kind of antenna it is, and where I might be able to find any manual for it?
TIA,
Terry

1283. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 01:10:03 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <LBBPc.201147$%_6.193565@attbi_s01>
Source record: 91554

Well, let's see. The sun is a nuclear fusion engine converting hydrogen into helium and spitting out all sorts of stuff like energy, corona mass ejections, solar flares, etc. Spitting out all that energy and debris should mean that the mass of the sun is decreasing. If that is so, then the gravitational mass of the sun has decreased. That should mean that the planets have to re-adjust the planetary orbits to achieve force balance.

Now, SOL is one star in millions in our galaxy. And all these stars are active nuclear engines. So I expect the gravitational constants throughout the Galaxy are also decreasing. So, an exercise for the student is to calculate the growth rate of the Galaxy as well as the growth rate of SOL's universe and the growth rate of the Earth's orbit.

Without doing some weird physics calculations, that are beyond my expertise, I can easily conclude that, Qualitatively, evidence exists that the planetary orbits have changed and are even changing today to balance the dynamically changing gravitational force conditions.

Now how to quantify the growth rate of all the various orbits ... that's "LEFT AS AN EXERCISE FOR THE STUDENT', to quote an old physics professor from many years ago. <grin>

DD

Jim Kelley wrote:

> Cecil Moore wrote:
>
>>Is there any evidence that the period of Earth's orbit has changed
>>in the past 7000 years? - in the past 2000 years?
>
>
> Perhaps. I hear bristlecone pine rings have changed. Presumably
> they're an indicator of the length of a year. Some say that means that
> the length of a second has changed. Others might claim it simply means
> the kinematics of Earths orbit have changed. :-)
>
> How ya doin', Cecil?
>
> 73, AC6XG

1284. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 01:15:06 UTC
From: j999w@aol.com
Message-ID: <20040802211506.26512.00002826@mb-m03.aol.com>
Source record: 91555

>As reported it is by definition 2:1.
>

I thought that maybe he's actually _measured_ the SWR and has a problem.

jw
k9rzz

1285. Re: Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 01:25:42 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <qQBPc.80501$eM2.6873@attbi_s51>
Source record: 91556

"Terry Ashland" <t_ashland@yahoo.com> wrote in message
news:6e6aeba9.0408021706.73cc662e@posting.google.com...
>I recently acquired an old Hy-Gain vertical. I don't believe its in
> the AVQ series. It has 3 traps (marked 10-15-20), and has a 4 spoke
> top hat. On top of the top hat is what looks like a Hustler vertical
> with a whip and a large ball on the end of the whip. Any ideas what
> kind of antenna it is, and where I might be able to find any manual
> for it?
> TIA,
> Terry

Terry -

Could it be the NewTronics/Hustler BTV series, such as the 4-BTV model ??

DX Engineering has the assembly manuals and parts for the Hustler HF
verticals
http://www.dxengineering.com/Products.asp?ID=27&SecID=16&DeptID=8

w9gb

1286. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 01:56:23 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <bhCPc.203589$IQ4.84919@attbi_s02>
Source record: 91557

Yes, I have a model. Did it sometime back when the question came up on modeling a real coil
instead of just using a point load . When you 'close couple' (not mutual coupling) elements
by placing an element INSIDE a coil which means inductive coupling plus capacitive coupling.
one CAN NOT accurately model parallel circuit radiators using point loads.
(Hopefully by now most will understand what I mean by parallel circuit radiators versus series)
When you break up the individual partial or complete coils you are able to control inter-coil
capacitance features. But then surely you have done all this before and thus know the outcome
of such an arrangement as you have ridiculed my antenna over the years and you know everything
there is to know. Actually I was surprised that the gurus did not model a loaded vertical this way
during the argument on depreciating current with constant phase angle on a coil that carried on to
Dayton, but then winning an argument is the requirement on this group not revealing facts.
But that was not the point of the posting. I was to point out that when looking at the future
it is wise to be knowledgeable of the past but not to be blinded by it.
There is a new antenna that
is going to be explained and without any actual technical information available there are only
closed minds regarding its true veracity
Nothing other than a personal observation/comment.
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:t8ktg0tvmbgr4p3iq2ma0sttq2ph6nm91q@4ax.com...
> On Mon, 02 Aug 2004 23:34:38 GMT, "aunwin" <aunwin@insightbb.com>
> wrote:
>
> >Why on earth would I do that Richard ?
>
> Because you said
> >> >Frankly I feel that many would be
> >> > surprised if they talked the talk and modelled such a thing
>
> So, no model?
>

> 73's
> Richard Clark, KB7QHC

1287. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 02:23:35 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <1nttg0lthmafim5hshh8pl7kp2l41m4rgv@4ax.com>
Source record: 91558

Let me check a minut... OH!- I'm Howard :).

-Howard.

On Mon, 02 Aug 2004 11:35:04 GMT, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>who's howard?
>"Ed Price" <edprice@cox.net> wrote in message
>news:gRkPc.28978$mg6.24716@fed1read02...
>>
>> "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
>> news:ps5Pc.4920$cK.4392@newsread2.news.pas.earthlink.net...
>> >
>> > "mike" <n0qfv@stic.net> wrote in message
>> > news:410cd3a2$0$74192$39cecf19@news.twtelecom.net...
>> > > Ed Price wrote:
>> > > > "Bill Turner" <noway@nohow.com> wrote in message
>> > > > news:89nkg0deec4k5ultam38lpgoa4kq8ioqfa@4ax.com...
>> > > > >
>> > > > >On Thu, 29 Jul 2004 12:24:48 -0500, Solomon Fernblatt
>> <spamfree@myhome>
>> > > > >wrote:
>> > > > >>
>> > > > >>
>> > > > >>>to get to our 1200
>> > > > >>>baud modems...
>> > > > >>
>> > > > >>____
>> > > > >>
>> > > > >>Newbie. REAL OT's had 300 baud modems. :-)
>> > > > >>
>> > > > >>--
>> > > > >>Bill, W6WRT
>> > > > >>QSLs via LoTW
>> > > > >>
>> > > > >
>> > > > >
>> > > > > Acoustic!!!!
>> > > > >
>> > > > > Ed
>> > > > > wb6wsn
>> > > > >
>> > > > Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>> > > >

>> > > QFV
>> >
>> > In the Summer of 1970 I worked for NASA on the Tektite II project, St
>> Johns,
>> > US Virgin Islands.
>> > I was a behavior observer when I wasn't operating my Swan or diving.
>> > We took data on IBM cards by punching holes with a stylus.
>> > Manually, like they used to vote in Florida.
>> >
>> > The cards were then taken by boat to an engineering firm on St Thomas
>that
>> > could put them in a card reader and transfer the data to magnetic tape.
>> > The tape was then flown to Austin, Texas for analysis. That was slow.
>> >
>> > For ham radio I used a dipole. Phone patches back to Texas were
>> consistently
>> > more reliable than the local phones.
>> >
>> > Now in my job I plan on remoting data acquisition in remote areas via a
>> > satellite internet connection.
>> >
>> > My "dial-up" was a TI Silent 700; circa 1977.
>> >
>> > 73
>> > H.
>> > NQ5H
>> >
>> >
>>
>> Howard, I think you control the high-ground of futility.
>> I was using an IBM keypunch machine (literally the size of an office desk)
>> circa 1966 to create Fortran fun. But I only heard legends of people
>> punching cards with a hand-held punch, and to think you were using a
>stylus.
>> Why, that must have been before Xacto knives were invented!
>>
>> Ed
>> wb6wsn
>>
>

1288. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 02:25:59 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <kqttg09dlhq1lltig05s6hgvdai26indat@4ax.com>
Source record: 91559

Usually 60, 66 or 75 WPM depending-

-Howard.

On Sun, 01 Aug 2004 18:55:15 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>mike wrote:
>> Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>
>How fast was an ASR-28?
>
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1289. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 02:43:03 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <QYCPc.2706$UW4.1773@bignews6.bellsouth.net>
Source record: 91560

You have a good point - If the earth completes its revolution faster, then time gets compressed
Same thing happens outdoors - The trees bend over in a wind - so to get a windy day, we can use a winch and cable to bend the tree - and the winds shall come

"Jim Kelley" <jwkelley@uci.edu> wrote in message news:410E7C11.BB6B9E64@uci.edu...
>
>
> Cecil Moore wrote:
>
> > The relativistic effects affect all watches. However,
> > the time drift can be observed by comparing atomic
> > clocks to Bristlecone Pine rings - they don't match.
> > The farther back in time they are compared, the farther
> > apart they appear to be in time.
>
> How do we know that it's not due simply to a change in the period of
> the Earth's orbit around the Sun?
>
> 73, Jim AC6XG

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1290. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 02:47:21 UTC
From: Howard <mensch90249>
Message-ID: <c0vtg0l70psuolpoapf8obdamv7779533a@4ax.com>
Source record: 91561

On Mon, 02 Aug 2004 23:23:35 -0300, Howard Eisenhauer
<howarde@REMOVECAPShfx.eastlink.ca> wrote:

>Let me check a minut... OH!- I'm Howard :).
>
>-Howard.
>
>On Mon, 02 Aug 2004 11:35:04 GMT, "H. Adam Stevens, NQ5H"
><NQ5H@ARRL.net> wrote:
>
>>who's howard?

You guys can't be Howard, I'm Howard. Now, if all three of us are
balding, graying and with beard & glasses we might have an actual
coincidence.

One of the other Howards

1291. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 02:53:18 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10gtvpemjukk463@corp.supernews.com>
Source record: 91562

"Howard" <mensch90249> wrote in message
news:c0vtg0l70psuolpoapf8obdamv7779533a@4ax.com...
> On Mon, 02 Aug 2004 23:23:35 -0300, Howard Eisenhauer
> <howarde@REMOVECAPShfx.eastlink.ca> wrote:
>
> >Let me check a minut... OH!- I'm Howard :).
> >
> >-Howard.
> >
> >On Mon, 02 Aug 2004 11:35:04 GMT, "H. Adam Stevens, NQ5H"
> ><NQ5H@ARRL.net> wrote:
> >
> >>who's howard?
>
> You guys can't be Howard, I'm Howard. Now, if all three of us are
> balding, graying and with beard & glasses we might have an actual
> coincidence.
>
> One of the other Howards

But I'm just H.
Doesn't stand for anything.
Honest.

1292. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 03:26:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410f0723_1@corp.newsgroups.com>
Source record: 91563

Jim Kelley wrote:
> What determines the amount of time between winters, Cecil? It could be
> that the length of a second changed, or the distance the Earth travels
> in a year changed.
> In some ways it amounts to the same thing, don't you agree?

According to the Lorentz transformations, length and time are affected
by velocity. But velocity = length/time.

v' = x'/t' = (x-vt)/[t-(vx/c^2)]
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1293. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 03:39:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410f0a1e$1_1@corp.newsgroups.com>
Source record: 91564

Mike Coslo wrote:
> Cecil Moore wrote:
>> Ever wonder how long a day was before the sun was created? :-)
>
> Hard to say, since it was night! ;^)

Nope, it wasn't. God created light on the *first* day. He created the sun, moon, and stars on the *fourth* day. After the Big Bang, when the universe became transparent, there probably was a lot of light but no stars yet.

Since God knows, before one is born, whether one is going to end up in heaven or hell, does one have free will? :-)

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1294. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 03:41:23 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <410f0a95$1_1@corp.newsgroups.com>
Source record: 91565

Mike Coslo wrote:
> Right, that's how I understand it. But what about the people that
> know that the flood covered the entire earth?

If you had been living on the shores of the fresh water Black Sea,
you would also have reported that it covered the entire earth.

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1295. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 04:48:35 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <T9CdnR16Z92-hJLcRVn-uQ@adelphia.com>
Source record: 91566

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:410f0a1e$1_1@corp.newsgroups.com...
> Mike Coslo wrote:
> > Cecil Moore wrote:
> >> Ever wonder how long a day was before the sun was created? :-)
> >
> > Hard to say, since it was night! ;^)
>
> Nope, it wasn't. God created light on the *first* day. He created
> the sun, moon, and stars on the *fourth* day. After the Big Bang,
> when the universe became transparent, there probably was a lot of
> light but no stars yet.
>
> Since God knows, before one is born, whether one is going to end
> up in heaven or hell, does one have free will? :-)

wasnt that a whale of a movie?

1296. Re: Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 05:01:46 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <__EPc.219880$JR4.123017@attbi_s54>
Source record: 91567

"Terry Ashland" <t_ashland@yahoo.com> wrote in message
news:6e6aeba9.0408021706.73cc662e@posting.google.com...
>I recently acquired an old Hy-Gain vertical. I don't believe its in
> the AVQ series. It has 3 traps (marked 10-15-20), and has a 4 spoke
> top hat. On top of the top hat is what looks like a Hustler vertical
> with a whip and a large ball on the end of the whip. Any ideas what
> kind of antenna it is, and where I might be able to find any manual
> for it?
> TIA,
> Terry

Here are the current HyGain (MFJ) HF vertical antennas
http://www.hy-gain.com/products.php?catid=2

gb

1297. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 05:06:33 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <k3FPc.1159$Uh.206@fed1read02>
Source record: 91568

"DJboutit" <Recordking@Hotmail.com> wrote in message
news:VCrPc.742$i%2.641@newssvr22.news.prodigy.com...
> I am thinking about going either lowfer 1750 meters 49mhz Hifer 13.55 MHz
> what do you guys think about that. If you had to pick out of those which
one
> would you chose need more info on the one you chose . Thanks for all the
> help guys.
>
>

I suggest 13.56 MHz, but don't use any more power than you need.

--
Ed
WB6WSN

1298. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 05:13:52 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <baFPc.1160$Uh.881@fed1read02>
Source record: 91569

"funkbastler" <funkbastler@eudoramail.com> wrote in message
news:38dsg0tdj1s1rdio9s8rb55aq0lm1l4k2r@4ax.com...
> On Sun, 1 Aug 2004 22:46:17 -0700, "Ed Price" <edprice@cox.net> wrote:
> >
> >And if you were civilized, you wouldn't be a bootlegger.
> >
>
> I frequently break the speed limit when I'm driving, too.
>
> Seriously though, the signal never makes it to the nearest
> neighbor's house. Is it a rules infraction? Yes. Is anyone
> else affected or going to complain? No.
>
> --
> -fb-
>

I must be missing something here.
You are in a very rural area, so you feel you don't need to comply with
broadcast radiated power restrictions.
You claim the signal never makes it to the nearest neighbor's house.
So what's the point in transmitting, if nobody receives the signal?
Are you doing some kind of subliminal suggestion on the prairie dogs?

--
Ed
WB6WSN

1299. Re: Is this wire 75 ohm twinlead?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 06:31:30 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0408022231.78865e7@posting.google.com>
Source record: 91570

"John D" <jawnd393@yahoo.com> wrote in message
news:<5XvOc.82$UN2.3@nwrddc02.gnilink.net>...
> I'm a new ham and this will be used for my first antenna.
>
> I have 97 ft of twinlead that I think might be 75 ohm but there is no
> identifying label on it.
> I have searched the web and can't find any information on 75 ohm twinlead.
> Can anyone identify this wire from these dimensions? ...

Hi John,
it is easy to measure the characteristic impedance Zo of any twinlead
or coax, if you have a device to measure inductances and capacitances.
The frequency you measure these parameters on should be close to the
working frequency, but even measurements on 1 kHz give a good
estimation of Zo for RF !
How to do it:
1/ take an arbitrarily long piece of the twinlead, about 3 m (10 ft)
should do;
2/ measure its capacitance C at one end, while the other end is open;
3/ measure its inductance L at one end, while the other end is
shorted;
4/ calculate Zo = sqrt (L/C)

BR from Ivan

1300. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 06:32:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3pbug0db0ttqo52k8i461q7lqbeamimno0@4ax.com>
Source record: 91421

On Tue, 03 Aug 2004 01:56:23 GMT, "aunwin" <aunwin@insightbb.com>
wrote:

>Yes, I have a model. Did it sometime back when the question came up on
>modeling a real coil
>instead of just using a point load
...
> But then surely you have done all this before and
>thus know the outcome
> of such an arrangement

Yes, as have several others. Nothing remarkable noted then by anyone.
Nothing new has been described since. Results between modeling the
literal coil and using a point source barely differed in the final
product (what would be received from such two "different" antennas) by
more than a quarter dB - if that much.

>Actually I was surprised that the gurus did not model a
>loaded vertical this way

As I've said, that was done - fairly early on in fact. There have
been no tests offered to dispute these conclusions and no new models
that have upset conventional wisdom.

So, does your model offer anything new on the horizon?

73's
Richard Clark, KB7QHC

1301. Re: Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 06:45:01 UTC
From: k9sqg@aol.com
Message-ID: <20040803024501.06719.00002502@mb-m13.aol.com>
Source record: 91422

Sounds like a 5BTV vertical...

1302. Re: Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 08:23:56 UTC
From: TT <iliumconstruction@earthlink.net>
Message-ID: <410F4A5C.64726961@earthlink.net>
Source record: 91423

Terry Ashland wrote:

> I recently acquired an old Hy-Gain vertical. I don't believe its in
> the AVQ series. It has 3 traps (marked 10-15-20), and has a 4 spoke
> top hat. On top of the top hat is what looks like a Hustler vertical
> with a whip and a large ball on the end of the whip. Any ideas what
> kind of antenna it is, and where I might be able to find any manual
> for it?
> TIA,
> Terry

http://www.hy-gain.com/products.php?prodid=AV-18AVT

1303. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 08:28:14 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <bfpp8yb5k95p.dlg@news.individual.net>
Source record: 91424
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sun, 01 Aug 2004 17:48:01 -0700, Jim Thompson wrote:

> On Sun, 01 Aug 2004 17:32:25 -0700, John Larkin
> <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:
>
> [snip]
>>Smith charts can be used to solve purely lumped-element problems, too.
>>
>>I wonder if Smith charts have ever been used for analyzing 50/60 Hz
>>power grids. Their losses are fairly low.
>>
>>John
>
> I wouldn't be surprised... I've been told that they locate power line
> faults using a reflectometer.
>
> ...Jim Thompson

That and thumpers. They also have a way to check a ground rod.
Either TDR, I think. Another neat thing I've heard is put a
mechanical vibrator on a down quy and go down the line listening for
loose hardware.
--
Best Regards,
Mike

1304. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 10:27:29 UTC
From: YD <yd.techHAT@techie.com>
Message-ID: <q2qug0pd2g33csk8g22tlboga18anhl2r8@4ax.com>
Source record: 91425
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
<pb@notthisbit.osiris1.co.uk> wrote:

>On Sat, 31 Jul 2004 13:42:31 -0400, Activ8 <reply2group@ndbbm.net>
>wrote:
>
>>On Sat, 31 Jul 2004 16:45:53 GMT, W3JDR wrote:
>>
>>> I enjoy reading this group, mostly for short sweet questions with short
>>> sweet answers. I take the time to sort through all of the questions and all
>>> of the responses in a thread because if I can't offer some advice, then
>>> maybe I'll learn something. In this case, I feel my time is wasted by both
>>> of you because there's nothing I can offer to this purely emotional
>>> exchange, >
>>
>>Uh. I gave good info and am trying to drill it home. Paul doesn't
>>like being chided. TFB.
>
>TFB?? That's what you'd like to think, pal. One insult too many. I
>don't have to put up with any more of your abuse and I won't.
>Bye, Mike. It's getting *very* boring.
>
><plonk!>

Surly little prick ain't you? Here you have a barrelful of useful
information but you just have to jump on the replies not to your
liking. Since you griped about them wasting your time I take it you're
a slow reader.

- YD.

--
Remove HAT if replying by mail.

1305. 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 13:51:32 UTC
From: n3ow@rcn.com
Message-ID: <fs5vg0h9kps1hej7599s3avs7lqte9bsd8@4ax.com>
Source record: 91426

I was planning to build a 40 meter loop hanging from a tree .
What I would like to know is the radiation off the end or broadside.

1306. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 14:19:11 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <z9NPc.82915$eM2.49298@attbi_s51>
Source record: 91427

And not that reliable! The old teletype machines would chew up tape,
develop stuck solenoids, and make noise like you never ...

Deacon Dave, W1MCE

Howard Eisenhauer wrote:
> Usually 60, 66 or 75 WPM depending-
>
SNIP
>>
>>>Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>>
>>How fast was an ASR-28?

1307. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 14:35:23 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ceo7vq$e4v$1@newshost.mot.com>
Source record: 91430
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

"Active8" <reply2group@ndbbm.net> wrote in message
news:bfpp8yb5k95p.dlg@news.individual.net...
> On Sun, 01 Aug 2004 17:48:01 -0700, Jim Thompson wrote:
>
> > On Sun, 01 Aug 2004 17:32:25 -0700, John Larkin
> > <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:
> >
> > [snip]
> >>Smith charts can be used to solve purely lumped-element problems, too.
> >>
> >>I wonder if Smith charts have ever been used for analyzing 50/60 Hz
> >>power grids. Their losses are fairly low.
> >>
> >>John

Actually they have significant loss. It turns out that a t-line with loss
has a complex characteristic impedance, not just resistive, so they have to
match complex Z0 's

73,
--
Steve N, K,9;d, c. i My email has no u's.

1308. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 14:43:10 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10gv9cdsplc9t20@corp.supernews.com>
Source record: 91429

Model 19's rule!!

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:z9NPc.82915$eM2.49298@attbi_s51...
> And not that reliable! The old teletype machines would chew up tape,
> develop stuck solenoids, and make noise like you never ...
>
> Deacon Dave, W1MCE
>
> Howard Eisenhauer wrote:
> > Usually 60, 66 or 75 WPM depending-
> >
> SNIP
> >>
> >>>Yeah really want slow. . . you ain't done slow till you done 110 Baud.
> >>
> >>How fast was an ASR-28?
>

1309. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 14:44:23 UTC
From: Jim Thompson <thegreatone@example.com>
Message-ID: <t19vg0dopi3k5mi198gkfubampe0in4vh2@4ax.com>
Source record: 91428
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 03 Aug 2004 07:27:29 -0300, YD <yd.techHAT@techie.com> wrote:

>On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
[snip]
>>TFB?? That's what you'd like to think, pal. One insult too many. I
>>don't have to put up with any more of your abuse and I won't.
>>Bye, Mike. It's getting *very* boring.
>>
>><plonk!>
>
>Surly little prick ain't you? Here you have a barrelful of useful
>information but you just have to jump on the replies not to your
>liking. Since you griped about them wasting your time I take it you're
>a slow reader.
>
>- YD.

"Slow reader"? "Slow learner" is more appropriate. Or maybe brain
dead ;-)

1310. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 15:16:59 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <410FAC6B.5090301@psu.edu>
Source record: 91431

Cecil Moore wrote:
> Mike Coslo wrote:
>
>> Cecil Moore wrote:
>>
>>> Ever wonder how long a day was before the sun was created? :-)
>>
>>
>> Hard to say, since it was night! ;^)
>
>
> Nope, it wasn't. God created light on the *first* day. He created
> the sun, moon, and stars on the *fourth* day. After the Big Bang,
> when the universe became transparent, there probably was a lot of
> light but no stars yet.
>
> Since God knows, before one is born, whether one is going to end
> up in heaven or hell, does one have free will? :-)

Right! Personally I think we should just sit around and see what happens. All the good, all the bad, it must be what he wants us to do, eh?

All I know is that between all the religions, there are plenty in which all of us are going to hell!

- Mike KB3EIA -

1311. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 15:19:16 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <410FACF4.6060201@psu.edu>
Source record: 91432

Cecil Moore wrote:
> Mike Coslo wrote:
>
>> Right, that's how I understand it. But what about the people that
>> know that the flood covered the entire earth?
>
>
> If you had been living on the shores of the fresh water Black Sea,
> you would also have reported that it covered the entire earth.

Yup. We actually agree on a lot of the stuff. From what many scientists think happened, the event would probably have caused a lot of people to get religion really quick.

- mike KB3EIA -

1312. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 15:26:15 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <r8OPc.185833$tH1.8524115@twister.southeast.rr.com>
Source record: 91433

"J999w" <j999w@aol.com> wrote in message
news:20040802211506.26512.00002826@mb-m03.aol.com...
> >As reported it is by definition 2:1.
> >
>
> I thought that maybe he's actually _measured_ the SWR and has a problem.
>
> jw
> k9rzz
Yes I did actually measure the SWR. I was also trying to convey that I was not trying to change the SWR by changing the cable length. I was concerned that of 100 ohms or 25ohms one may be a better load for the TX. After some testing last night and this morning there does seem to be a difference, Modulation is a little better when the TX sees 100 ohms. I suspect there may be even more difference if the SWR were higher. Is this why CB antenna manufactureres recommend using 18ft(3/4 wl) of coax with their antennas. Perhaps there is a little truth to the myth.

1313. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 15:42:28 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncgvcj7.29mu.bit-bucket@walnut.config.com>
Source record: 91434

On Mon, 02 Aug 2004 16:34:03 GMT, Jimmie hath writ:
> Items involved are solidstate transceiver with fixed output impedance of 50
> ohms, 50 ohm feed line and vertical antenna with a feed point impedance of
> 25 ohms. The one thing that can be varied id feed line length. Should the
> length be adjusted so the radio sees the 25 ohm impedance or 100 ohms
> impedance or something in between. OK I will go ahead and admit it, this is
> for a CB in the camper. Dont get road condition reports on 2 meters.

Depending on how long the run is from the rig to the antenna, use
either a 1/4 or a 3/4 electrical wavelength feedline made up of
parallel sections of RG-59. It will be Close Enuf.

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1314. Re: Icom AH-4 Placement and Really Cold Weather

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 15:46:37 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <410fb59f_1@news1.prserv.net>
Source record: 91435

Andrew:

Faced with your situation, here is what I would do. Put a 100 watt light bulb with the tuner, and add a remote temperature sensor just inside the AH-4, or at least thermally tied to the surface on the side away from the bulb. This can be wired or wireless, although I would use a remote thermistor without any electronics. Carefully wrap the items in several layers of fiberglass insulation, fully covering all sides. For mounting, suspend the "ball" of fiberglass in some plastic straps, near where the antenna exits. Now, before you operate, remotely turn on the light, and wait until the temperature indicator indicates the tuner is above -10° C, and hit the tune button. Be sure there is a remote indicator the light is on, to preclude overheating if left unattended.

--
Crazy George
Remove N O and S P A M imbedded in return address

"A Saciuk" <asaciuk@hotmail.com> wrote in message
news:507b07c2.0407302040.2750099b@posting.google.com...
> Hello!
>
> I've been thinking about buying an Icom AH-4 Tuner, to run multiband
> on an end fed antenna. I was hoping to place the AH-4 as near to the
> roof as possible, as the end fed is going to run from the roof peak of
> the back of my house, to a large tree in the front yard (too many
> wires, hydro poles and accidents waiting to happen in the back).
>
> Now here is the problem... Our winters north of the 49th often reach
> temperatures of -35 celcius for weeks on end, which according to the
> literature, are beyond the AH-4's tolerance of -10 celcius.
>
> What would be the easiest solution? The attic naturally gets as cold
> as outdoors, so I can't stash the tuner in the attic, and run the wire
> out. I don't know about putting the tuner in the closet to run a
> single wire through the wall and out, as I want to get the
> transmitting wire high up, and as far away from myself as possible. I
> have an Icom 746, so I was hoping to actually use full power (100
> watts) and feel comfortable about keeping the AH-4 at a reasonable
> temperature, and yet not rearranging my DNA while I transmit.
>
> Any suggestions would be greatly appreciated
>
> 73,
> Andrew

> VE4SCK

1315. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 16:55:37 UTC
From: Thierry <"to answer direct see http">
Message-ID: <410fc38a$1@news.vo.lu>
Source record: 91436

Hi,

After analyse using a tower equipped with a electrical cage (lift) to lower the antenna, it seems that there is no solution to lower a 3-ele steppir antenna without moving the central element off the passage what 'd modify its F/B ratio... thus to avoid even if the steppir has to be tune for each band (and frequency).

As we don't want to climb on the tower each time we have to lower the antenna there is no other solution than buying another model.

The door is not close for Steppir, but knowing its high price (over 2x a titanex 7 ele for example), it seems that our best choice is to look at Titanex.
Less than 700 euros vs. 1300, even if the price is not the problem, the gain of a 7 ele 'd be better than the 3-ele steppir or even optibeam. Titanex is also very light (titanium) and not all models are bulky.

So if this is not a "bye-bye steppir", we are not far, this simply because the tower uses a lift...

So the lesson to learn : when you select your tower with a lift, think about twice about the model of antenna you want to place on top.
We don't regret at all the Hummel tower but we have to select your antenna consequently and not the contrary.

Thierry, ON4SKY
http://www.astrosurf.com/lombry

"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:410d525e@news.vo.lu...
> Hi
>
> One of my friend come home with a fine question.
> He is in the process to buy a new beam and found Steppir quite interesting
> due to its auto adjusting without moving the elements (all tuning per band
> is made inside the tubes in winding up a copper strap).
>
> Question to Steppir users as I am not sure of the answer:
>
> Is the separation between parasitic elements important as, in all cases,
> there is an adjustment on each band ?
> We ask for the question because we would like to move the central element
of
> a 3-ele steppir multiband beam of about 50 cm to the right /left in order
to

> be able to take the antenna down to the ground (around the pylon). Up to
now
> the central element is in the passage. A way should be to me it slightly
to
> the L or R...
>
> Is it possible or not without changing the performance (mainly SWR) of the
> Steppir ?
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>

1316. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 17:10:39 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10gvi0uijaecs64@corp.supernews.com>
Source record: 91437

Then get a 2 element SteppIR.
Just a thought.
73
H., NQ5H

"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:410fc38a$1@news.vo.lu...
> Hi,
>
> After analyse using a tower equipped with a electrical cage (lift) to
lower
> the antenna, it seems that there is no solution to lower a 3-ele steppir
> antenna without moving the central element off the passage what 'd modify
> its F/B ratio... thus to avoid even if the steppir has to be tune for each
> band (and frequency).
>
> As we don't want to climb on the tower each time we have to lower the
> antenna there is no other solution than buying another model.
>
> The door is not close for Steppir, but knowing its high price (over 2x a
> titanex 7 ele for example), it seems that our best choice is to look at
> Titanex.
> Less than 700 euros vs. 1300, even if the price is not the problem, the
gain
> of a 7 ele 'd be better than the 3-ele steppir or even optibeam. Titanex
is
> also very light (titanium) and not all models are bulky.
>
> So if this is not a "bye-bye steppir", we are not far, this simply because
> the tower uses a lift...
>
> So the lesson to learn : when you select your tower with a lift, think
about
> twice about the model of antenna you want to place on top.
> We don't regret at all the Hummel tower but we have to select your antenna
> consequently and not the contrary.
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>
>
> "Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
> wrote in message news:410d525e@news.vo.lu...

> > Hi
> >
> > One of my friend come home with a fine question.
> > He is in the process to buy a new beam and found Steppir quite
interesting
> > due to its auto adjusting without moving the elements (all tuning per
band
> > is made inside the tubes in winding up a copper strap).
> >
> > Question to Steppir users as I am not sure of the answer:
> >
> > Is the separation between parasitic elements important as, in all cases,
> > there is an adjustment on each band ?
> > We ask for the question because we would like to move the central
element
> of
> > a 3-ele steppir multiband beam of about 50 cm to the right /left in
order
> to
> > be able to take the antenna down to the ground (around the pylon). Up to
> now
> > the central element is in the passage. A way should be to me it slightly
> to
> > the L or R...
> >
> > Is it possible or not without changing the performance (mainly SWR) of
the
> > Steppir ?
> >
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry
> >
> >
>
>

1317. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 17:17:42 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <WMPPc.1029$P16.50@nwrddc04.gnilink.net>
Source record: 91438
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

"Jim Thompson" <thegreatone@example.com> wrote in message
news:t19vg0dopi3k5mi198gkfubampe0in4vh2@4ax.com...
> On Tue, 03 Aug 2004 07:27:29 -0300, YD <yd.techHAT@techie.com> wrote:
>
> >On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
> [snip]
> >>TFB?? That's what you'd like to think, pal. One insult too many. I
> >>don't have to put up with any more of your abuse and I won't.
> >>Bye, Mike. It's getting *very* boring.
> >>
> >><plonk!>
> >
> >Surly little prick ain't you? Here you have a barrelful of useful
> >information but you just have to jump on the replies not to your
> >liking. Since you griped about them wasting your time I take it you're
> >a slow reader.
> >
> >- YD.
>
> "Slow reader"? "Slow learner" is more appropriate. Or maybe brain
> dead ;-)

Jim

There is a big benefit to someone as ill informed as myself when these
discussions involve guys who are actually informed and present
understandable info for "jump starting" guys like me.
I probably wouldnt have read the posts if I'd started reading only *one*
side, without some kind of contradiction.

Jerry

1318. Lindenblad antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 17:24:20 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <8TPPc.1032$P16.1005@nwrddc04.gnilink.net>
Source record: 91439

I think I understand most of how the Lindenblad antenna works. But, I have questions about how to get omniazimuth circular polarization, and wonder how the Lindenblad concept is doing that.
If anyone had insight and/or experience with the Lindenblad antenna design, I'd sure like to learn more about it.

Jerry

1319. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 18:08:04 UTC
From: MikeWhy <mikewhy@my-deja.com>
Message-ID: <8wQPc.977$dV2.401@newssvr22.news.prodigy.com>
Source record: 91440

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:410EA848.5040209@psu.edu...
> Seems that shelly animals today actually have micro growth rings that
> happen on a daily basis. Some fossils have what *appear* to be such a
> thing, but he is being cautious before suggesting such.

He should be cautious. Internal structures of fossils would seem to be quite the contradiction. At least from my simplistic understanding of what fossils are, and how they came to be.

1320. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 18:32:46 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <hh8sxiilavvh$.dlg@news.individual.net>
Source record: 91441
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 3 Aug 2004 09:35:23 -0500, Steve Nosko wrote:

> "Active8" <reply2group@ndbbm.net> wrote in message
> news:bfpp8yb5k95p.dlg@news.individual.net...
>> On Sun, 01 Aug 2004 17:48:01 -0700, Jim Thompson wrote:
>>
>>> On Sun, 01 Aug 2004 17:32:25 -0700, John Larkin
>>> <jjlarkin@highlandSNIPtechTHISnologyPLEASE.com> wrote:
>>>
>>> [snip]
>>>>Smith charts can be used to solve purely lumped-element problems, too.
>>>>
>>>>I wonder if Smith charts have ever been used for analyzing 50/60 Hz
>>>>power grids. Their losses are fairly low.
>>>>
>>>>John
>
> Actually they have significant loss. It turns out that a t-line with loss
> has a complex characteristic impedance, not just resistive, so they have to
> match complex Z0 's
>
> 73,

Well, that was Jim yer replyin' to, but since you're not Paul
Burridge, that's perfectly fine and I'm glad you did. It reminds me
that back when that big Canusa (not Canusa TM) happened, the poster
that goes by Ralph and Diane IIRC wrote a nice piece about the
dynamics of power systems, line reactance and all that.
--
Best Regards,
Mike

1321. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 18:47:07 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <oiv8v4dx9xeu$.dlg@news.individual.net>
Source record: 91442
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 03 Aug 2004 17:17:42 GMT, Jerry Martes wrote:

> "Jim Thompson" <thegreatone@example.com> wrote in message
> news:t19vg0dopi3k5mi198gkfubampe0in4vh2@4ax.com...
>> On Tue, 03 Aug 2004 07:27:29 -0300, YD <yd.techHAT@techie.com> wrote:
>>
>>>On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
>> [snip]
>>>>TFB?? That's what you'd like to think, pal. One insult too many. I
>>>>don't have to put up with any more of your abuse and I won't.
>>>>Bye, Mike. It's getting *very* boring.
>>>>
>>>><plonk!>
>>>
>>>Surly little prick ain't you? Here you have a barrelful of useful
>>>information but you just have to jump on the replies not to your
>>>liking. Since you griped about them wasting your time I take it you're
>>>a slow reader.
>>>
>>>- YD.
>>
>> "Slow reader"? "Slow learner" is more appropriate. Or maybe brain
>> dead ;-)
>
> Jim
>
> There is a big benefit to someone as ill informed as myself when these
> discussions involve guys who are actually informed and present
> understandable info for "jump starting" guys like me.
> I probably wouldnt have read the posts if I'd started reading only *one*
> side, without some kind of contradiction.
>
> Jerry

That's a new twist for me. You saying we should slap each other
around some more? ;)

Just to summarize the part that's IMO most relevant to Burridges
learning disability, Chis Bowick, on pp. 105 - 107 of Secrets of RF
Design shows an example of a Z plotted on the Smith chart and he
labels it with the complex number representing a Z load and it's
reflection coefficient, both of which can be read directly off the
chart. He then give conversion equations that can be used to find a
numerical answer.

What bugged me is that it's so easy to errantly think that a rect to polar conversion on the Z would yield an S param when in fact doing that just gives you a polar representation of Z, i.e. |Z| = sqrt(R^2 + X^2) and Z ang = atan(X/Y)

--
Best Regards,
Mike

1322. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 19:52:18 UTC
From: gwhite <gwhite@TaxesInstitutes.com>
Message-ID: <410FECF2.394FC6C1@TaxesInstitutes.com>
Source record: 91443
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Activ8 wrote:
>
> On Sun, 1 Aug 2004 06:38:31 +0100, John Woodgate wrote:
>
> > I read in sci.electronics.design that Activ8 <reply2group@ndbbm.net>
> > wrote (in <1kpirajws18ml$.dlg@news.individual.net>) about 'S - Y
> > Parameter conversion with Smith Chart', on Sun, 1 Aug 2004:
> >>On Sun, 1 Aug 2004 02:19:02 +0000 (UTC), Reg Edwards wrote:
> >>
> >>>> Could you please explain that a bit more? The chart is a graphical way
> >>>> of doing mathematics. Where does frequency enter the picture?
> >>
> >>Reaactance depends on it. I must not understand your question.
> >
> > Reg wrote that the Smith Chart doesn't work at low frequencies. Since
> > it's just a way of solving equations, it can't fail to work. What
> > 'fails' is that at low frequencies, either different equations apply
> > (no) or different terms in the equations become significant (yes).
> >>>>
> >>>> If you mean that the characteristic impedances of 'transmission lines'
> >>>> at low frequencies aren't resistive, I quite agree.
> >>>> --
> >>> ================================
> >>>
> >>> The characteristic impedances of ALL practical lines aren't resistive.
> >
> > Well, yes, but at high enough frequencies, the reactive term is small.
> >
> > Zo^2 = (R + jwL)/(G + jwC)
> >
> > For high enough w (omega), provided R (series resistance) and G (shunt
> > loss resistance) are low, Zo^2 = L/C.
> >
> >> But
> >>> your statement just about sums up the situation.
> >
> > You agree with my explanation above, that it's not the chart that
> > 'fails', but that terms in the equations change significance at low
> > frequencies?
>
> Makes sense to me, but I think you're asking Reg, judging by the
> number of quote ">" characters.

I think I agree with you. The Smith Chart is not frequency dependent. The models regarding RF transmission line impedance do start to break down at "low" frequencies. This has nothing to do with the Smith Chart. You get the same bad answers with analytical method using bad models as you do with a Smith Chart. IOW, Reg was wrong. The Smith Chart is not limited to solving only transmission line problems.

1323. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 19:54:40 UTC
From: gwhite <gwhite@TaxesInstitutes.com>
Message-ID: <410FED80.1A5BF632@TaxesInstitutes.com>
Source record: 91444
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

Activ8 wrote:
>

> Ok. I think I understand your confusion, now, and I hope I didn't
> call it a Y param (part of the OP subject) and just said it's not an
> s-param, which as I said, isn't expressed as a complex number, IME.

I regard polar numbers as complex, especially if the angle is not zero.

1324. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 20:14:08 UTC
From: John Woodgate <jmw@jmwa.demon.contraspam.yuk>
Message-ID: <AsyVd7EQI$DBFwVH@jmwa.demon.co.uk>
Source record: 91445
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

I read in sci.electronics.design that gwhite
<gwhite@TaxesInstitutes.com> wrote (in <410FED80.1A5BF632@TaxesInstitute
s.com>) about 'S - Y Parameter conversion with Smith Chart', on Tue, 3
Aug 2004:
>
>
>Activ8 wrote:
>>
>
>> Ok. I think I understand your confusion, now, and I hope I didn't
>> call it a Y param (part of the OP subject) and just said it's not an
>> s-param, which as I said, isn't expressed as a complex number, IME.
>
>I regard polar numbers as complex, especially if the angle is not zero.

Of course; polar format is just one way of writing complex numbers.
--
Regards, John Woodgate, OOO - Own Opinions Only.
The good news is that nothing is compulsory.
The bad news is that everything is prohibited.
http://www.jmwa.demon.co.uk Also see http://www.isce.org.uk

1325. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 20:24:21 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <410FF475.90402@psu.edu>
Source record: 91447

MikeWhy wrote:
> "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> news:410EA848.5040209@psu.edu...
>
>>Seems that shelly animals today actually have micro growth rings that
>>happen on a daily basis. Some fossils have what *appear* to be such a
>>thing, but he is being cautious before suggesting such.
>
>
> He should be cautious. Internal structures of fossils would seem to be quite
> the contradiction. At least from my simplistic understanding of what fossils
> are, and how they came to be.
>

Indeed. There are only certain fossils that are applicable to this scrutiny. Those are ones that have fossilized in extremely fine sediment, where the individual particles are small enough to preserve the detail after replacement, and the rare fossils in which the nacre itself has managed to survive all this time.

- Mike KB3EIA -

1326. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 20:28:17 UTC
From: Bada Bing <BadaBing@implant.com>
Message-ID: <nxSPc.12544$vX4.2741@cyclops.nntpserver.com>
Source record: 91446
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.dogie.is.an.idiot

"itoldyouiamnotiamnotgeorge" <itoldyouiamnotiamnotgeorge@yahoo.comm> wrote
in message news:Xns9538C6BC411E71234567890@216.196.97.136...
> Steveo <moparholic@hotmail-nospam.com> wrote in
> news:20040801011419.320$9q@newsreader.com:
>
> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> >> "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> >> news:20040731214036.252$vP_-_@newsreader.com...
> >> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> >> >
> >> > -snip good points-
> >> >
> >> > Hi Lee, are you going to the Woodward dream cruise this year? I am
> >> > as long as we don't have another east coast power failure. ;)
> >>
> >> Why? You want to know when I won't be home so you can slip over here
> >> and stick another note under my door like a chicken. Oh by the way is
> >> that construction on 18 done, and is the hillbilly that owns the
> >> ramshackle lawn mower business east of I-71 sign still up? I keep
> >> waiting for his sign to fall over in to the mud pit next to it. The
> >> flag in the window is tacky.
> >>
> > LOL..you fuckin' jackass. Is his name Mr Peebles too? Only reason
> > I ask is the last Mr Peebles slapped you and your boyfriend dogie
> > like a red headed step-child.
> >
> > I want to meet you, that's why I'm asking.
>
> what is your address chisel chest?
>
>
Are you going to sing show tunes to him? har de har har har!!!!!!

From: WA3MOJ (WA3MOJ@home.com)
Subject: Re: Band looking for a singer
View: Complete Thread (2 articles)
Original Format
Newsgroups: phl.forsale
Date: 2004-07-28 07:35:05 PST

I sing Liza Minelli tunes real well... I even look a little like her when Im
dressed in drag. Can I audition?

In article <prevostn-31A5AF.16251015062004@netnews.upenn.edu>, Nicolas Pr&#65533;vost
says...
>
>Me and my friends have played off and on for a few years and we are
>getting to playing out again. We are mostly interested in playing
>originals but always have a few covers handy for fun.
>The music is very guitar oriented (We are failry versatile when it comes
>to jamming but the stuff that seems to work best for us when it comes to
>originals is mostly alternative/melancholic (Think The Cure)/punk even
>metal at times). This being said we are looking for a singer, not a
>screamer, we are not hardcore at all.
>We are easy going, committed to at least two practices a week so that we
>can put a gig or two together by next month (We have played in places
>such as Doc Watson's). We have a place to practice: an auditorium
>(Located on PENN campus).
>
>Someone capable of coming with his/her own melodies and lyrics would be
>a plus but not necessary.
>
>Email me at: prevostn@mail.med.upenn.edu
>
>Nick

1327. HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 20:52:19 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nac7rFudi8rU1@uni-berlin.de>
Source record: 91448

I've been looking (not too hard - been busy) but does anyone know
of a source for a HF/6m duplexer? I want to go from my FT-857D's
HF/6m output to two different antennas - one for 6m only & the other
through a Z100 autotuner to a Van Gorden "All Bander".

Both antennas work good and the 6'er (an inverted V) dosen't need
a tuner. Yes, I know - the Z100 will go to 6 meters but at only 50w
and when I push it to 50w all sorts of wierd things start happening. So,
I built a monoband 6m inverted V.

Right now it's like this:

Rig
coax jumper
MFJ 860 1.8-54 mhz swr/pwr meter
coax jumper
MFJ 1702B 2 pos. ant switch

From the switch you either go directly to the 6 meter antenna or
via the other position to a Z100 autotuner then on to the Van Gorden
All Bander.

The setup works pretty good except when I forget to switch to the
6m antenna and try to tx on 6 with the Z100/All Bander - then all
hell breaks loose! RF in the shack big time! Hell, even my PC shuts off
so bad I have to reset it's power supply via the rear switch. Yeck!

That can't be good, long term wise......

On another thought - has anyone had any luck coating the inside
of the Z100's plastic case with Caig's CalKote copper spray? If
it works 1/10th as good as thier "DeOxit" contact spray, I'm gonna
have to get me some....

Ken KG0WX
Denver, CO

1328. Re: Lindenblad antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 21:02:13 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2nacqcFu8qu7U1@uni-berlin.de>
Source record: 91449

Will e-mail you the results of NEC-2 studies for a c-pol Lindenblad in the FM broadcast band...

R. Fry

1329. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 21:28:55 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <hpjmbckfheau.dlg@news.individual.net>
Source record: 91450
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 3 Aug 2004 21:14:08 +0100, John Woodgate wrote:

> I read in sci.electronics.design that gwhite
> <gwhite@TaxesInstitutes.com> wrote (in <410FED80.1A5BF632@TaxesInstitute
> s.com>) about 'S - Y Parameter conversion with Smith Chart', on Tue, 3
> Aug 2004:
>>
>>
>>Activ8 wrote:
>>>
>>
>>> Ok. I think I understand your confusion, now, and I hope I didn't
>>> call it a Y param (part of the OP subject) and just said it's not an
>>> s-param, which as I said, isn't expressed as a complex number, IME.
>>
>>I regard polar numbers as complex, especially if the angle is not zero.
>
> Of course; polar format is just one way of writing complex numbers.

Sorry. I should have said "not expressed in rectangular form, IME."
<blush>
--
Best Regards,
Mike

1330. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:04:16 UTC
From: YD <yd.techHAT@techie.com>
Message-ID: <1320h0dlk9a83o53mce8vrdvjg37dsagaj@4ax.com>
Source record: 91451
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 03 Aug 2004 07:44:23 -0700, Jim Thompson
<thegreatone@example.com> wrote:

>On Tue, 03 Aug 2004 07:27:29 -0300, YD <yd.techHAT@techie.com> wrote:
>
>>On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
>[snip]
>>>TFB?? That's what you'd like to think, pal. One insult too many. I
>>>don't have to put up with any more of your abuse and I won't.
>>>Bye, Mike. It's getting *very* boring.
>>>
>>><plonk!>
>>
>>Surly little prick ain't you? Here you have a barrelful of useful
>>information but you just have to jump on the replies not to your
>>liking. Since you griped about them wasting your time I take it you're
>>a slow reader.
>>
>>- YD.
>
>"Slow reader"? "Slow learner" is more appropriate. Or maybe brain
>dead ;-)

Both or more. As Jerry states, these threads are of interest to all
general readers, I copied a couple of posts to the saved folder for
later perusal. So please don't let PB's bad behaviour discourage them.
I only suggest that PB be ignored when he flies off the handle and
starts dissing perfectly good replies because they're not what he
expected or he doesn't understand them. Somehow he manages to generate
huge threads of inanities and then gripe about wasting his time :-)

- YD.
--
Remove HAT if replying by mail.

1331. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:23:49 UTC
From: icycalmca@yahoo.com
Message-ID: <c70365ef.0408031423.1a7c52d3@posting.google.com>
Source record: 91452

Cecil Moore <w5dxp@hotmail.com> wrote in message
news:<410f0a95$1_1@corp.newsgroups.com>...
> Mike Coslo wrote:
> > Right, that's how I understand it. But what about the
> > people that know that the flood covered the entire earth?
>
> If you had been living on the shores of the fresh water Black Sea,
> you would also have reported that it covered the entire earth.

Mike and Cecil:

Sadly, you, like millions of others, have been misled on this topic.
Alas, there was no "Noachian" Black Sea Flood, and
the science in William Ryan's and Walter Pitman's book
"Noah's Flood: the event that changed history" has in
several cases been superceded by better information that
indicates that there was no such event, and was in most
cases preceded by evidence that indicated that there was
no such event.
Ryan and Pitman set out to overturn the orthodox view of the
history of the Black Sea, but they have apparently abandoned
their hypothesis, if more recent articles co-authored by Ryan
are any indication. The orthodox view has prevailed, subject
to some recent modifications.

There is evidence that there was an _outflow_ southward
from the Black Sea through the Bosphorus into the Mediterranean
from more than 10000 years ago
(well before Ryan and Pitman's initial 5600 BCE flood date),
continuously until the present day, though there may have been
a relatively short interruption.
And evidence from the south shore of the Black sea shows that
the level of the Black Sea was only 18 m below the present level
at the time of the supposed flood.
The more recent claim by Ryan puts the flood date at 8400 BP,
or about 9000 years ago, but then the "floodwaters" through the
Bosphorus channel would have been only about 5 metres deep.
9000 years ago is when everybody else always thought that
Mediterranean saltwater first entered the Black Sea. At about
that time, the last phase of Glacial Lake Agassiz, in central
Canada, finally found an outlet to the sea through or under the
remnants of the Laurentide Ice Sheet, and so out into the North
Atlantic, raising sea level an appreciable amount, and _perhaps_
triggering a sudden inflow of saltwater into the Black Sea basin.
But probably not sudden or great enough to inspire a Noachian

Flood myth.
Better candidates are widespread inundation of low-lying parts
of the Persian Gulf associated with the final draining of Glacial
Lake Agassiz, and similar flooding of the Tigris-Euphrates delta,
and (most likely) simultaneous flooding of the Tigris and Euphrates,
which would have looked like a flooding of the entire world from
the viewpoint of a person near present-day Baghdad. These candidates
could each or all have inspired the flood myth in the epic of
Gilgamesh, which predates the first known appearance of the Noachian
Flood myth.

Check this out, for a layman-friendly synopsis of the refutation:

http://home.entouch.net/dmd/bseaflod.htm

On the draining of Glacial Lake Agassiz:

http://cgrg.geog.uvic.ca/abstracts/PerkinsOnceDuring.html

Full article:

http://www.highbeam.com/library/doc0.asp?DOCID=1G1:94334735&refid=ip_encyclopedia_hf&COOKIE=NO

And here's a fairly recent news item on refutation of Ryan's
and Pitman's hypothesis:

http://www.charlotte.com/mld/observer/news/4949335.htm

<BEGIN QUOTE>
January 14, 2003

Scientists are seriously challenging a recent, fascinating proposal
that Noah's epic story -- setting sail with an ark jam-full of animal
couples -- was based on an actual catastrophic flood that suddenly
filled the Black Sea 7,500 years ago, forcing people to flee.

In a detailed new look at the rocks, sediments, currents and seashells
in and around the Black Sea, an international research team pooh-poohs
the Noah flood idea, arguing that all the geologic, hydrologic and
biologic signs are wrong.

Little that the earth can tell us seems to fit the Noah story, they
say. The new research takes direct aim at the work of two Columbia
University geologists -- William Ryan and Walter Pitman -- whose
proposal in 1997 ignited much new interest, and much new research,
into Middle East history and geology.

<END QUOTE>

And here are a couple of scientific papers:

"Is the abrupt drowning of the Black Sea shelf at 7150 yr BP a myth?"

http://lava.tamu.edu/courses/geol101/herbert/docs/BlackSeaFloodCritique.pdf

"Persistent Holocene Outflow from the Black Sea to the Eastern Mediterranean Contradicts Noah's Flood Hypothesis"

http://www.geosociety.org/pubs/gsatoday/toc0205.htm

Oh, and lately some Turks have come to the conclusion that there was no Bosphorus Strait until about 6000 years ago, well after Ryan and Pitman would have had their damburst.

There's lots more, but you'd need access to scientific journals to read it; you could ask me for more details if you want them. Some of the articles are available on the Web.

Sorry to splash water in the frying pan.

Daryl Krupa

1332. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:31:06 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <aa40h0hv768mgkf3mjost51028p05v237n@4ax.com>
Source record: 91453
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 03 Aug 2004 12:52:18 -0700, gwhite
<gwhite@TaxesInstitutes.com> wrote:

>I think I agree with you. The Smith Chart is not frequency dependent.
>The models regarding RF transmission line impedance do start to break
>down at "low" frequencies.

That was me, but I wasn't seriously suggesting they did break down.
Just having a gently sarcastic prod at Reg's lofty, generalised
dismissal of the usefulness of the Chart.
--

"What is now proved was once only imagin'd." - William Blake, 1793.

1333. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:40:42 UTC
From: icycalmca@yahoo.com
Message-ID: <c70365ef.0408031440.1070ca41@posting.google.com>
Source record: 91454

Cecil Moore <w5dxp@hotmail.com> wrote in message
news:<410f0a95$1_1@corp.newsgroups.com>...
> Mike Coslo wrote:
> > Right, that's how I understand it. But what about the people that
> > know that the flood covered the entire earth?
>
> If you had been living on the shores of the fresh water Black Sea,
> you would also have reported that it covered the entire earth.

Mike and Cecil:

Ballard admits defeat:

<QUOTE>
"We were not able to get a smoking gun," said Robert Ballard,
the underwater explorer and discoverer of the Titanic, who
led the $5 million Black Sea expedition last July and August.
< ... >
Also, scientists found nothing that could have established
whether the site was a human settlement.
"We didn't find a farmer or his tools," Ballard said.
<END QUOTE>

http://tinyurl.com/599l4

OR

http://tinyurl.com/4njq8

OR

http://hosted.ap.org/dynamic/stories/B/BLACK_SEA?SITE=NCGRE&SECTION=HOME&TEMPLATE=DEFAULT

Daryl Krupa

1334. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:48:21 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <on40h0dr4hdojoe8lqgr39casit8g8ltcn@4ax.com>
Source record: 91455
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 3 Aug 2004 14:47:07 -0400, Active8 <reply2group@ndbbm.net>
wrote:

Can't stay in a killfile, eh? Don't you know morphing is against
Usenet etiquette? No matter. You'll get tired of morphing long before
I get tired of plonking you.

>On Tue, 03 Aug 2004 17:17:42 GMT, Jerry Martes wrote:
>
>> "Jim Thompson" <thegreatone@example.com> wrote in message
>> news:t19vg0dopi3k5mi198gkfubampe0in4vh2@4ax.com...
>>> On Tue, 03 Aug 2004 07:27:29 -0300, YD <yd.techHAT@techie.com> wrote:
>>>
>>>>On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
>>> [snip]
>>>>>TFB?? That's what you'd like to think, pal. One insult too many. I
>>>>>don't have to put up with any more of your abuse and I won't.
>>>>>Bye, Mike. It's getting *very* boring.
>>>>>
>>>>><plonk!>
>>>>
>>>>Surly little prick ain't you? Here you have a barrelful of useful
>>>>information but you just have to jump on the replies not to your
>>>>liking. Since you griped about them wasting your time I take it you're
>>>>a slow reader.

YD? Is he still here wasting bandwidth? I don't see his crap anymore;
at least *he* hasn't morphed. But he has backed the wrong horse...

>>> "Slow reader"? "Slow learner" is more appropriate. Or maybe brain
>>> dead ;-)

Bloody hell! Another wanker! Must be a bad day. ;->

>Just to summarize the part that's IMO most relevant to Burridges
>learning disability, Chis Bowick, on pp. 105 - 107 of Secrets of RF
>Design shows an example of a Z plotted on the Smith chart and he
>labels it with the complex number representing a Z load and it's
>reflection coefficient, both of which can be read directly off the
>chart. He then give conversion equations that can be used to find a
>numerical answer.
>
>What bugged me is that it's so easy to errantly think that a rect to
>polar conversion on the Z would yield an S param when in fact doing
>that just gives you a polar representation of Z, i.e. |Z| = sqrt(R^2

>+ X^2) and Z ang = atan(X/Y)

So at last you admit you got it wrong. It's about time. I can see where you f*cked up, Mike. I eventually got to the bottom of your elementary reading error in mistaking the relevant equations on P.107 for the simple ones on P.105 (from memory). Anyone can make a dumb-ass mistake like that, but it takes a *man* to admit it and apologise for going off so rudely on half-cock.
Jerry: you're reply wasn't correct but that doesn't bother me. You gave it in good faith and with the best of intentions. There are a lot of guys here who could learn from you where manners and good faith are concerned.
G'nite all...

p.

--

"What is now proved was once only imagin'd." - William Blake, 1793.

1335. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:53:23 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <DHUPc.24547$iK.5989@newsread2.news.atl.earthlink.net>
Source record: 91456

<n3ow@rcn.com> wrote in message
news:fs5vg0h9kps1hej7599s3avs7lqte9bsd8@4ax.com...
> I was planning to build a 40 meter loop hanging from a tree .
> What I would like to know is the radiation off the end or broadside.
>
A full wave loop will radiate broadside on the band of design.

Dan/W4NTI

1336. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:55:03 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040803185503.118$Z7@newsreader.com>
Source record: 91457
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb,alt.dogie.is.an.idiot

"Bada Bing" <BadaBing@implant.com> wrote:
> "itoldyouiamnotiamnotgeorge" <itoldyouiamnotiamnotgeorge@yahoo.comm>
> wrote in message news:Xns9538C6BC411E712345678900@216.196.97.136...
> > Steveo <moparholic@hotmail-nospam.com> wrote in
> > news:20040801011419.320$9q@newsreader.com:
> >
> > > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > >> "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> > >> news:20040731214036.252$vP_-_@newsreader.com...
> > >> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > >> >
> > >> > -snip good points-
> > >> >
> > >> > Hi Lee, are you going to the Woodward dream cruise this year? I am
> > >> > as long as we don't have another east coast power failure. ;)
> > >>
> > >> Why? You want to know when I won't be home so you can slip over here
> > >> and stick another note under my door like a chicken. Oh by the way
> > >> is that construction on 18 done, and is the hillbilly that owns the
> > >> ramshackle lawn mower business east of I-71 sign still up? I keep
> > >> waiting for his sign to fall over in to the mud pit next to it. The
> > >> flag in the window is tacky.
> > >>
> > > LOL..you fuckin' jackass. Is his name Mr Peebles too? Only reason
> > > I ask is the last Mr Peebles slapped you and your boyfriend dogie
> > > like a red headed step-child.
> > >
> > > I want to meet you, that's why I'm asking.
> >
> > what is your address chisel chest?
> >
> >
> Are you going to sing show tunes to him? har de har har har!!!!!!
>
> From: WA3MOJ (WA3MOJ@home.com)
> Subject: Re: Band looking for a singer
> View: Complete Thread (2 articles)
> Original Format
> Newsgroups: phl.forsale
> Date: 2004-07-28 07:35:05 PST
>
> I sing Liza Minelli tunes real well... I even look a little like her when
> Im dressed in drag. Can I audition?

>
DOH! LMFAO!

1337. Re: Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 22:55:58 UTC
From: t_ashland@yahoo.com
Message-ID: <6e6aeba9.0408031455.4cc70728@posting.google.com>
Source record: 91458

Thanks to all who responded to my question. It is indeed an 18AVT and
I have downloaded the instruction pdf from the Hy-gain/MFJ site.
Thanks again!
73,
Terry, WK0F
TT <iliumconstruction@earthlink.net> wrote in message
news:<410F4A5C.64726961@earthlink.net>...
> Terry Ashland wrote:
>
> > I recently acquired an old Hy-Gain vertical. I don't believe its in
> > the AVQ series. It has 3 traps (marked 10-15-20), and has a 4 spoke
> > top hat. On top of the top hat is what looks like a Hustler vertical
> > with a whip and a large ball on the end of the whip. Any ideas what
> > kind of antenna it is, and where I might be able to find any manual
> > for it?
> > TIA,
> > Terry
>
> http://www.hy-gain.com/products.php?prodid=AV-18AVT

1338. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 23:18:46 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <5870h0pget01s2go1v5vu9pskcbkvcal9o@4ax.com>
Source record: 91459

The ones *I* overhauled never had those problems buddy- ;>.

H.

On Tue, 03 Aug 2004 14:19:11 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>And not that reliable! The old teletype machines would chew up tape,
>develop stuck solenoids, and make noise like you never ...
>
>Deacon Dave, W1MCE
>
>Howard Eisenhauer wrote:
>> Usually 60, 66 or 75 WPM depending-
>>
>SNIP
>>>
>>>>Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>>>
>>>How fast was an ASR-28?

1339. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 23:19:59 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <3c70h0pog2eqolupm3nhrjmqfnoekqd8hi@4ax.com>
Source record: 91460

On Mon, 02 Aug 2004 19:47:21 -0700, Howard <mensch90249> wrote:

>On Mon, 02 Aug 2004 23:23:35 -0300, Howard Eisenhauer
><howarde@REMOVECAPShfx.eastlink.ca> wrote:
>
>>Let me check a minut... OH!- I'm Howard :).
>>
>>-Howard.
>>
>>On Mon, 02 Aug 2004 11:35:04 GMT, "H. Adam Stevens, NQ5H"
>><NQ5H@ARRL.net> wrote:
>>
>>>who's howard?
>
>You guys can't be Howard, I'm Howard. Now, if all three of us are
>balding, graying and with beard & glasses we might have an actual
>coincidence.
>
>One of the other Howards

Hi Howard!

Howard!

1340. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 23:22:46 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <1e70h0pr7buf8im8ao0s69ita1hqlto53n@4ax.com>
Source record: 91461

On Tue, 3 Aug 2004 09:43:10 -0500, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>Model 19's rule!!

Pretty Close, but 14's had (hard to believe I know, but true none the
less) a nicer keyboard feel :).

-One of the "H" people.

>
>"Dave Shrader" <david.shrader@comcast.net> wrote in message
>news:z9NPc.82915$eM2.49298@attbi_s51...
>> And not that reliable! The old teletype machines would chew up tape,
>> develop stuck solenoids, and make noise like you never ...
>>
>> Deacon Dave, W1MCE
>>
>> Howard Eisenhauer wrote:
>> > Usually 60, 66 or 75 WPM depending-
>> >
>> SNIP
>> >>
>> >>>Yeah really want slow. . . you ain't done slow till you done 110 Baud.
>> >>
>> >>How fast was an ASR-28?
>>
>

1341. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 23:28:36 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <1270h01529msaj0b2kcv51hhafrpu791o4@4ax.com>
Source record: 91462

On Mon, 2 Aug 2004 22:13:52 -0700, "Ed Price" <edprice@cox.net> wrote:

>
>I must be missing something here.
>You are in a very rural area, so you feel you don't need to comply with
>broadcast radiated power restrictions.
>You claim the signal never makes it to the nearest neighbor's house.
>So what's the point in transmitting, if nobody receives the signal?
>Are you doing some kind of subliminal suggestion on the prairie dogs?

Power restrictions are in place to prevent interference. If I'm
a couple of miles from anybody and transmit with 200 mW instead
of 100 mW, I don't see a big problem.

The point is that I can slip a small FM receiver in my pocket, put
on some earphones, and listen to whatever I want to while I'm out
in the pasture, in the barn, in the shop, or wherever else. (Why
would I want to broadcast to the neighbors anyway? My ego isn't
that big.)

We have coyotes, foxes, deer, bobcats, and wild turkeys here, but
no prairie dogs.

--
-fb-

1342. Re: Update on DLM Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 23:48:28 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0408031548.543bd7df@posting.google.com>
Source record: 91463

Well it all depends as to what you find interesting
What interests me does not interest a lot of people.
Since my top band antenna is now 'laid to rest' I gave
myself a few moments today to design an antenna for 144 MHz
using a minimum of three verticles clustered within
a four inch radius column using 1 " dia aluminium tubing
with a total height of 54 inches high.
No big deal about those dimensions as I was not
pursuing any optimum other than resonance.
Ohmic value was high at resonance thus needed a 4:1 balun
to get it down to 50 ohms(tho I did see 50 ohms resonance at some odd frequencies).
Antenna to be on perfect ground and fed at the ground level.

Results were as follows:

Frequency bandwidth (2:1 swr) was 105 MHz thru 149 MHz
Max gain 9.8 dbi
Max F/B 9db
Lowest gain 4.35 dbi

Pattern varied but generally gain was at horizon
Now there was no optimisation for say 50 ohm feed
gain, bandspread, or front to back and as I said, I
used a minimum cluster of three verticals and only
half coil at vertical end connections.
All of these values can be made better depending
on requirements.
Now I find this sort of thing "interesting" as optimisation
can take different forms INCLUDING making the O/A length
shorter. Now I know that all of the gurus have done this
exercise but because it is not in the books us newbies
have to go our own way and experiment for ourselves.
Ofcourse we don't always share things on the group because
of the hassles that emanate from the gurus. But I for one
believe that 'all is not known', that everything has not been
tried and I am having a ball making small horizonal and
vertical antennas for all the bands using my own designs
without feeling the need to crow about my succeses.
Thus one should see why such a person as I would show a great
interest in what is described as "revolutionary" by an East Coast
experimentor.
Happy experimenting
Art
(For those that are interested, I used an enclosed circle of
around 8" dia with the circle calculations divided into

20 segments and I only used 1/2 of a circle/coil winding at
each vertical cluster ending .Don't waste you time with coil
pitch as it makes things unnessesarily complicated Positioning
of these half coils both vertically and degree wise and vertical
cluster are the prime contributors for optimisation .
Computor program used AO Pro by Beasley For those using other
type programs set the first vertical/coil connection at the top,
second one at the bottom, third next to the top e.t.c
and this will get you in the initial ballpark)

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<3pbug0db0ttqo52k8i461q7lqbeamimno0@4ax.com>...
> On Tue, 03 Aug 2004 01:56:23 GMT, "aunwin" <aunwin@insightbb.com>
> wrote:
>
> >Yes, I have a model. Did it sometime back when the question came up on
> >modeling a real coil
> >instead of just using a point load
> ...
> > But then surely you have done all this before and
> >thus know the outcome
> > of such an arrangement
>
> Yes, as have several others. Nothing remarkable noted then by anyone.
> Nothing new has been described since. Results between modeling the
> literal coil and using a point source barely differed in the final
> product (what would be received from such two "different" antennas) by
> more than a quarter dB - if that much.
>
> >Actually I was surprised that the gurus did not model a
> >loaded vertical this way
>
> As I've said, that was done - fairly early on in fact. There have
> been no tests offered to dispute these conclusions and no new models
> that have upset conventional wisdom.
>
> So, does your model offer anything new on the horizon?
>
> 73's
> Richard Clark, KB7QHC

1343. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-03 23:52:53 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <sNWdnbr5mpvSuI3cRVn-uA@comcast.com>
Source record: 91464

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:2nac7rFudi8rU1@uni-berlin.de...
> I've been looking (not too hard - been busy) but does anyone know
> of a source for a HF/6m duplexer? I want to go from my FT-857D's
> HF/6m output to two different antennas - one for 6m only & the other
> through a Z100 autotuner to a Van Gorden "All Bander".
>
> Both antennas work good and the 6'er (an inverted V) dosen't need
> a tuner. Yes, I know - the Z100 will go to 6 meters but at only 50w
> and when I push it to 50w all sorts of wierd things start happening. So,
> I built a monoband 6m inverted V.
>
> Right now it's like this:
>
> Rig
> coax jumper
> MFJ 860 1.8-54 mhz swr/pwr meter
> coax jumper
> MFJ 1702B 2 pos. ant switch
>
> From the switch you either go directly to the 6 meter antenna or
> via the other position to a Z100 autotuner then on to the Van Gorden
> All Bander.
>
> The setup works pretty good except when I forget to switch to the
> 6m antenna and try to tx on 6 with the Z100/All Bander - then all
> hell breaks loose! RF in the shack big time! Hell, even my PC shuts off
> so bad I have to reset it's power supply via the rear switch. Yeck!
>
> That can't be good, long term wise......
>
> On another thought - has anyone had any luck coating the inside
> of the Z100's plastic case with Caig's CalKote copper spray? If
> it works 1/10th as good as thier "DeOxit" contact spray, I'm gonna
> have to get me some....
>
> Ken KG0WX
> Denver, CO
>
>
>
Ken,
Is there any voltage available in the back that would let you use a relay
instead?

Tam/WB2TT

1344. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 00:02:15 UTC
From: Active8 <reply2group@ndbbm.net>
Message-ID: <1brii7fd3jdu6$.dlg@news.individual.net>
Source record: 91465
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

On Tue, 03 Aug 2004 23:48:21 +0100, Paul Burridge wrote:

> On Tue, 3 Aug 2004 14:47:07 -0400, Active8 <reply2group@ndbbm.net>
> wrote:
>
> Can't stay in a killfile, eh?

Please Paul, don't flatter yourself. You're the only person whose
ever killfiled me and I wasn't losing any sleep over it.

> Don't you know morphing is against
> Usenet etiquette? No matter. You'll get tired of morphing long before
> I get tired of plonking you.

I changed to Activ8 after someone mispelled it. I thought it was a
more proper way to convey "activate" as opposed to "active 8". I got
tired of looking at it and stuck the "e" back in there.

Active8 - when I throw the switch, it works.
>
>>On Tue, 03 Aug 2004 17:17:42 GMT, Jerry Martes wrote:
>>
>>> "Jim Thompson" <thegreatone@example.com> wrote in message
>>> news:t19vg0dopi3k5mi198gkfubampe0in4vh2@4ax.com...
>>>> On Tue, 03 Aug 2004 07:27:29 -0300, YD <yd.techHAT@techie.com> wrote:
>>>>
>>>>>On Sat, 31 Jul 2004 23:49:27 +0100, Paul Burridge
>>>> [snip]
>>>>>>TFB?? That's what you'd like to think, pal. One insult too many. I
>>>>>>don't have to put up with any more of your abuse and I won't.
>>>>>>Bye, Mike. It's getting *very* boring.
>>>>>>
>>>>>><plonk!>
>>>>>
>>>>>Surly little prick ain't you? Here you have a barrelful of useful
>>>>>information but you just have to jump on the replies not to your
>>>>>liking. Since you griped about them wasting your time I take it you're
>>>>>a slow reader.
>
> YD? Is he still here wasting bandwidth? I don't see his crap anymore;
> at least *he* hasn't morphed. But he has backed the wrong horse...
>
>>>> "Slow reader"? "Slow learner" is more appropriate. Or maybe brain
>>>> dead ;-)
>

> Bloody hell! Another wanker! Must be a bad day. ;->
>
>>Just to summarize the part that's IMO most relevant to Burridges
>>learning disability, Chis Bowick, on pp. 105 - 107 of Secrets of RF
>>Design shows an example of a Z plotted on the Smith chart and he
>>labels it with the complex number representing a Z load and it's
>>reflection coefficient, both of which can be read directly off the
>>chart. He then give conversion equations that can be used to find a
>>numerical answer.
>>
>>What bugged me is that it's so easy to errantly think that a rect to
>>polar conversion on the Z would yield an S param when in fact doing
>>that just gives you a polar representation of Z, i.e. |Z| = sqrt(R^2
>>+ X^2) and Z ang = atan(X/Y)
>
> So at last you admit you got it wrong.

Just the polar conversion part which I recanted long ago - probably
in my second post. I haven't reversed my original statement that the
Z can be read as S directly off the chart *as is* if you measure the
vector and project it to the unit circle. The equations on p 105 are
irrelevant to the original question.

> It's about time. I can see
> where you f*cked up, Mike. I eventually got to the bottom of your
> elementary reading error in mistaking the relevant equations on P.107
> for the simple ones on P.105 (from memory).

That ain't the case. I was looking at the chart and suggested a
polar conversion, which I later termed a "knee jerk" response.

> Anyone can make a dumb-ass
> mistake like that, but it takes a *man* to admit it and apologise for
> going off so rudely on half-cock.

I slapped you around because you couldn't just accept that the
graphical solution works. Also, you're slow on the uptake (remember
not understanding those colored arcs you posted) and it might just
be possible that serious electronic design (as opposed to twiddling
values in spice) isn't for you. I'm one of those assholes that isn't
satisfied until I can derive the design equations from basic
principles and all that. Despite the work required to aquire that
ability, I keep at it until it's second nature.

--
Best Regards,
Mike

1345. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 00:06:57 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <pJidnZwYPfMJtY3cRVn-sQ@comcast.com>
Source record: 91466

Thierry,

I am not familiar with your tower, but gather that the cage comes down the side. Isn't there some heading of the antenna that would let you do this? Maybe rotated 45 degrees to the tower face, with the boom fastened to the side of the mast away from the tower. I wonder how accurate your 50 cm number was. Could it end up beong 5 or 10 cm?

Tam/WB2TT
"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:410fc38a$1@news.vo.lu...
> Hi,
>
> After analyse using a tower equipped with a electrical cage (lift) to
lower
> the antenna, it seems that there is no solution to lower a 3-ele steppir
> antenna without moving the central element off the passage what 'd modify
> its F/B ratio... thus to avoid even if the steppir has to be tune for each
> band (and frequency).
>
> As we don't want to climb on the tower each time we have to lower the
> antenna there is no other solution than buying another model.
>
> The door is not close for Steppir, but knowing its high price (over 2x a
> titanex 7 ele for example), it seems that our best choice is to look at
> Titanex.
> Less than 700 euros vs. 1300, even if the price is not the problem, the
gain
> of a 7 ele 'd be better than the 3-ele steppir or even optibeam. Titanex
is
> also very light (titanium) and not all models are bulky.
>
> So if this is not a "bye-bye steppir", we are not far, this simply because
> the tower uses a lift...
>
> So the lesson to learn : when you select your tower with a lift, think
about
> twice about the model of antenna you want to place on top.
> We don't regret at all the Hummel tower but we have to select your antenna
> consequently and not the contrary.
>
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>

>
> "Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
> wrote in message news:410d525e@news.vo.lu...
> > Hi
> >
> > One of my friend come home with a fine question.
> > He is in the process to buy a new beam and found Steppir quite
interesting
> > due to its auto adjusting without moving the elements (all tuning per
band
> > is made inside the tubes in winding up a copper strap).
> >
> > Question to Steppir users as I am not sure of the answer:
> >
> > Is the separation between parasitic elements important as, in all cases,
> > there is an adjustment on each band ?
> > We ask for the question because we would like to move the central
element
> of
> > a 3-ele steppir multiband beam of about 50 cm to the right /left in
order
> to
> > be able to take the antenna down to the ground (around the pylon). Up to
> now
> > the central element is in the passage. A way should be to me it slightly
> to
> > the L or R...
> >
> > Is it possible or not without changing the performance (mainly SWR) of
the
> > Steppir ?
> >
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry
> >
> >
>
>

1346. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 00:15:39 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nao4hFu3rflU1@uni-berlin.de>
Source record: 91467

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:sNWdnbr5mpvSuI3cRVn-uA@comcast.com...
>
> Ken,
> Is there any voltage available in the back that would let you use a relay
> instead?
>
> Tam/WB2TT
>
>

There is the "Band" output - a voltage on a pin on the ACC jack that varies
on which band you select. It would, of course be simple to build a
comparator
circuit that makes the simple logic step:

If A => Band then Relay = on else off.

Problem is I'd have to build the enclosure, with the comparator, power
supply
relays and a connection to the ACC jack which, by the way, is currently used
by my W4RT One Touch Tune (for the Z100). The OTT is really sealed good
so breaking into it to tap the line would be impossible. So, I'd need the
following:

Din Plug
Din Jack
Breadboard
1.8-54 mhz 100 watt rf relay
Comparator
power supply
Sheilded case
Ferrites
Misc parts & components.

Whew!

I'd much rather have a duplexer....easy.

Of course if all else fails, I'll just keep on using my 2 position ant
switch.

73's de Ken KG0WX

1347. Re: What about digital radio?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 01:00:29 UTC
From: CW <"no adddress"@spam>
Message-ID: <UYqdnWqESp2wqI3cRVn-tQ@comcast.com>
Source record: 91468

Look up AM. Note that it has nothing to do with frequency.
"wolfee" <clambrain@com.invalid> wrote in message
news:DPeOc.349677$Gx4.319225@bgtnsc04-news.ops.worldnet.att.net...
> Hal, if it is digital in the AM band and digital in the FM band then how
can
> we differentiate if we dont call it AM digital and FM digital? I think you
> should visit the designers site at www.ibiquity.com for some
enlightenment.

1348. Re: Arnold Schwarzenegger Commits Suicide **TROJAN VIRUS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 01:11:57 UTC
From: Emily <Emily@yahoo.com>
Message-ID: <BdKdnRQeqe_hqo3cRVn-qQ@comcast.com>
Source record: 91469
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

And I was dumb enough to click on the link just to see what would happen!!
N3YOZ
"Who cares!" <Noone@nowhere.com> wrote in message
news:VUTMc.127$191.121@newsread1.dllstx09.us.to.verio.net...
> He ought to be SHOT. The damned SCUM BAG. WC
>
> "Mark" <vincentelectronics@erols.com> wrote in message
> news:be26fc90.0407251114.4ba13da3@posting.google.com...
> > Ken B <kenbern@hotmail.com> wrote in message
> news:<MPG.1b6c0bce611073739896a0@netnews.comcast.net>...
> > > In article <k3pMc.7107$YK2.903412@news4.srv.hcvlny.cv.net>,
> > > david.sanxter@columbia.edu says...
> > > > Early this morning Arnold Schwarzenegger was found hanging by his
neck
> from the large oak tree in his Californian garden. In a suicide note
found
> at the scene he tells of his sordid sex life and lack of will to live. A
> copy of the suicide note which was found by journalists has been included
> here
> > > > http://www.theparadise.x-y.net/ArnoldSchwarzenegger.zip
> > > >
> > > >
> > > TROJAN VIRUS
> > >
> > > KA7RGO
> >
> > x-y.net is a HUGE SPAMMER!! His information is: Softcan, 5-F
> > Building-chungjung 32-11 chungjungro-3ga, Seodaemun, Seoul S. Korea
> > 120013, 82-2-392-3096, peteryun@softcan.com. The spammer needs to
> > commit suicide.
>
>

1349. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 01:24:26 UTC
From: k9sqg@aol.com
Message-ID: <20040803212426.15036.00000932@mb-m02.aol.com>
Source record: 91470

Generally broadside but, depending on lengths and where it is fed, that can be altered.

1350. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 01:39:40 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <w7XPc.24768$iK.2541@newsread2.news.atl.earthlink.net>
Source record: 91371

"Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
news:2nac7rFudi8rU1@uni-berlin.de...
> I've been looking (not too hard - been busy) but does anyone know
> of a source for a HF/6m duplexer? I want to go from my FT-857D's
> HF/6m output to two different antennas - one for 6m only & the other
> through a Z100 autotuner to a Van Gorden "All Bander".

In the time it took you to type this in you could have gone to aesham.com
and found the duplexer you need . Forgot the brand I have but the one I
have seems to work ok to split off 6 meters for me.

1351. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 01:50:03 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2natkvFudh0oU1@uni-berlin.de>
Source record: 91372

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:w7XPc.24768$iK.2541@newsread2.news.atl.earthlink.net...
>
> "Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
> news:2nac7rFudi8rU1@uni-berlin.de...
> > I've been looking (not too hard - been busy) but does anyone know
> > of a source for a HF/6m duplexer? I want to go from my FT-857D's
> > HF/6m output to two different antennas - one for 6m only & the other
> > through a Z100 autotuner to a Van Gorden "All Bander".
>
> In the time it took you to type this in you could have gone to aesham.com
> and found the duplexer you need . Forgot the brand I have but the one I
> have seems to work ok to split off 6 meters for me.
>
>

I looked there but didn't see any that specifically split HF from 6
meters....

What brand / model do you have? Can you look, please?

Ken KG0WX

1352. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:15:07 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040803221507.28808.00000716@mb-m26.aol.com>
Source record: 91373

>>In a detailed new look at the rocks, sediments, currents and seashells in and around the Black Sea, an international research team pooh-poohs the Noah flood idea, arguing that all the geologic, hydrologic and biologic signs are wrong.<<

Some interesting stuff that can shed some light on flood and shift of continents and Atlantis can be found here:

http://www.flem-ath.com/del1.htm

Yuri, www.K3BU.us
www.computeradio.us

1353. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:18:56 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <kIXPc.24807$iK.9038@newsread2.news.atl.earthlink.net>
Source record: 91374

> I looked there but didn't see any that specifically split HF from 6
> meters....
>
> What brand / model do you have? Can you look, please?
>
> Ken KG0WX

It is a Comet CF360. It may have fooled you as it is marked to go from 1.3 to 30 mhz and then from 40 to 470 mhz. That means that even though you do not need it, any frequency above 40 mhz up to 470 mhz can be used on one port and any ham band below 30 mhz can be used on the other port. You can get them with coax leads and connectors or just the conectors on the duplexer if I remember correctly. That is where a A or B will come after the 360. I think the price was about $ 70. I think I payed about $ 30 for a used one at a hamfest several years ago.

1354. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:21:50 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <smh0h0pv2qpb1m5silvnmutavdekce0d2d@4ax.com>
Source record: 91375

On Tue, 3 Aug 2004 19:50:03 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>
>"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
>news:w7XPc.24768$iK.2541@newsread2.news.atl.earthlink.net...
>>
>> "Ken Bessler" <kg0wx@NOSPAMyahoo.com> wrote in message
>> news:2nac7rFudi8rU1@uni-berlin.de...
>> > I've been looking (not too hard - been busy) but does anyone know
>> > of a source for a HF/6m duplexer? I want to go from my FT-857D's
>> > HF/6m output to two different antennas - one for 6m only & the other
>> > through a Z100 autotuner to a Van Gorden "All Bander".
>>
>> In the time it took you to type this in you could have gone to aesham.com
>> and found the duplexer you need . Forgot the brand I have but the one I
>> have seems to work ok to split off 6 meters for me.
>>
>>
>
>I looked there but didn't see any that specifically split HF from 6
>meters....
>
>What brand / model do you have? Can you look, please?
>
>Ken KG0WX
>

page 137 of current AES catalog:

hf to 6/2m duplexers

comet cf706a
or
diamond mx62m

bob
k5qwg

1355. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:34:49 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <dXXPc.24844$iK.17047@newsread2.news.atl.earthlink.net>
Source record: 91376

> >I looked there but didn't see any that specifically split HF from 6
> >meters....
> >
> >What brand / model do you have? Can you look, please?
> >
> >Ken KG0WX
> >
>
> page 137 of current AES catalog:
>
> hf to 6/2m duplexers
>
> comet cf706a
> or
> diamond mx62m
>
> bob
> k5qwg

Those modles will not do the split that was asked for . The Icom puts out
LF to 6 meters one one connector and 2 meters up on the other connector. He
wants one that will split 30 mhz and below from the 6 meter band.
The ones you listed will not do the splits.

1356. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:46:31 UTC
From: artie <artie.m@gmail.com>
Message-ID: <030820041946309332%artie.m@gmail.com>
Source record: 91377

I've used an older part, the Comet CF-360 on my 706 for a number of
years. The ports are marked 1-30 and 49-470. I ran it on a network
analyzer at work some years ago, and seem to remember the 3db points
being around 42 MHz.

73--

In article <dXXPc.24844$iK.17047@newsread2.news.atl.earthlink.net>,
Ralph Mowery <rmowery28146@earthlink.net> wrote:

> > >I looked there but didn't see any that specifically split HF from 6
> > >meters....
> > >
> > >What brand / model do you have? Can you look, please?
> > >
> > >Ken KG0WX
> > >
> >
> > page 137 of current AES catalog:
> >
> > hf to 6/2m duplexers
> >
> > comet cf706a
> > or
> > diamond mx62m
> >
> > bob
> > k5qwg
>
> Those modles will not do the split that was asked for . The Icom puts out
> LF to 6 meters one one connector and 2 meters up on the other connector. He
> wants one that will split 30 mhz and below from the 6 meter band.
> The ones you listed will not do the splits.
>
>
>

1357. Re: Identify old Hy-Gain Vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:50:16 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41104F05.950E3A7B@shaw.ca>
Source record: 91378

Terry Ashland wrote:
>
> I recently acquired an old Hy-Gain vertical. I don't believe its in
> the AVQ series. It has 3 traps (marked 10-15-20), and has a 4 spoke
> top hat. On top of the top hat is what looks like a Hustler vertical
> with a whip and a large ball on the end of the whip. Any ideas what
> kind of antenna it is, and where I might be able to find any manual
> for it?
> TIA,
> Terry

With a few radials (I used 10, none of them longer than about twenty feet)
it is a very nice antenna for 80/40/20/15/10. I used one for quite a while.
Wish I hadn't sold it!

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1358. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 02:54:48 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nb1dvFujmi2U1@uni-berlin.de>
Source record: 91379

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:kIXPc.24807$iK.9038@newsread2.news.atl.earthlink.net...
> > I looked there but didn't see any that specifically split HF from 6
> > meters....
> >
> > What brand / model do you have? Can you look, please?
> >
> > Ken KG0WX
>
> It is a Comet CF360. It may have fooled you as it is marked to go from
1.3
> to 30 mhz and then from 40 to 470 mhz. That means that even though you
do
> not need it, any frequency above 40 mhz up to 470 mhz can be used on one
> port and any ham band below 30 mhz can be used on the other port. You can
> get them with coax leads and connectors or just the conectors on the
> duplexer if I remember correctly. That is where a A or B will come after
> the 360. I think the price was about $ 70. I think I payed about $ 30
for
> a used one at a hamfest several years ago.
>
>
>
>

Thanks, that's the one I need!

73's es gd dx de Ken KG0WX

1359. Re: Woodward

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 03:26:37 UTC
From: iamnotgeorge2004@yahoo.com
Message-ID: <c034bd2.0408031926.6284b890@posting.google.com>
Source record: 91380
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

Steveo <moparholic@hotmail-nospam.com> wrote in message
news:<20040803185503.118$Z7@newsreader.com>...
> "Bada Bing" <BadaBing@implant.com> wrote:
> > "itoldyouiamnotiamnotgeorge" <itoldyouiamnotiamnotgeorge@yahoo.comm>
> > wrote in message news:Xns9538C6BC411E71234567890@216.196.97.136...
> > > Steveo <moparholic@hotmail-nospam.com> wrote in
> > > news:20040801011419.320$9q@newsreader.com:
> > >
> > > > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > > >> "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> > > >> news:20040731214036.252$vP_-_@newsreader.com...
> > > >> > "Leland C. Scott" <kc8ldo@arrl.net> wrote:
> > > >> >
> > > >> > -snip good points-
> > > >> >
> > > >> > Hi Lee, are you going to the Woodward dream cruise this year? I am
> > > >> > as long as we don't have another east coast power failure. ;)
> > > >>
> > > >> Why? You want to know when I won't be home so you can slip over here
> > > >> and stick another note under my door like a chicken. Oh by the way
> > > >> is that construction on 18 done, and is the hillbilly that owns the
> > > >> ramshackle lawn mower business east of I-71 sign still up? I keep
> > > >> waiting for his sign to fall over in to the mud pit next to it. The
> > > >> flag in the window is tacky.
> > > >>
> > > > LOL..you fuckin' jackass. Is his name Mr Peebles too? Only reason
> > > > I ask is the last Mr Peebles slapped you and your boyfriend dogie
> > > > like a red headed step-child.
> > > >
> > > I want to meet you, that's why I'm asking.
> > >
> > what is your address chisel chest?
> > >
> > >
> > Are you going to sing show tunes to him? har de har har har!!!!!!
> >
> > From: WA3MOJ (WA3MOJ@home.com)
> > Subject: Re: Band looking for a singer
> > View: Complete Thread (2 articles)
> > Original Format
> > Newsgroups: phl.forsale
> > Date: 2004-07-28 07:35:05 PST
> >

> > I sing Liza Minelli tunes real well... I even look a little like her when
> > Im dressed in drag. Can I audition?
> >
> DOH! LMFAO!

>From: Twistedhed (twistedhed@webtv.net)
>Subject: FS: Hitler's Toothpick ï¿½
>Newsgroups: rec.radio.cb, rec.antiques, rec.radio.swap, >rec.radio.amateur.policy
>Date: 2001-12-20 19:12:27 EST
>
>For Sale, toothpick used by Adolph Hitler. It is authentic because
>there is a letter (signed by me) saying so. Comes with a photo of
>Hitler with his hand near his face (no one can prove he is NOT using
>this toothpick) as corroboration. I am asking $1500.
>
>If you don't like the price, let's talk.
>
>Thank you,
>Twistedhed

LMFAO!

1360. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 03:56:07 UTC
From: Mike <km6ab@pacbell.net>
Message-ID: <r7ZPc.72$nB3.41@newssvr27.news.prodigy.com>
Source record: 91381

On the Z-100 thought,
I had a problem using a Z-100 near a computer monitor because RFI was getting into the HF and 6m receive through the plastic Z-100 case. I had a roll of self adhesive copper tape on hand and coated the entire inside of the case and it pretty much cured the RFI problem. Now only 6m has a slight increase in noise compared to the Z-100 out of the circuit. I think anything you can do to shield the Z-100 case is a step in the right direction.
Mike

Ken Bessler wrote:
> I've been looking (not too hard - been busy) but does anyone know
> of a source for a HF/6m duplexer? I want to go from my FT-857D's
> HF/6m output to two different antennas - one for 6m only & the other
> through a Z100 autotuner to a Van Gorden "All Bander".
>
> Both antennas work good and the 6'er (an inverted V) dosen't need
> a tuner. Yes, I know - the Z100 will go to 6 meters but at only 50w
> and when I push it to 50w all sorts of wierd things start happening. So,
> I built a monoband 6m inverted V.
>
> Right now it's like this:
>
> Rig
> coax jumper
> MFJ 860 1.8-54 mhz swr/pwr meter
> coax jumper
> MFJ 1702B 2 pos. ant switch
>
> From the switch you either go directly to the 6 meter antenna or
> via the other position to a Z100 autotuner then on to the Van Gorden
> All Bander.
>
> The setup works pretty good except when I forget to switch to the
> 6m antenna and try to tx on 6 with the Z100/All Bander - then all
> hell breaks loose! RF in the shack big time! Hell, even my PC shuts off
> so bad I have to reset it's power supply via the rear switch. Yeck!
>
> That can't be good, long term wise......
>
> On another thought - has anyone had any luck coating the inside
> of the Z100's plastic case with Caig's CalKote copper spray? If
> it works 1/10th as good as thier "DeOxit" contact spray, I'm gonna
> have to get me some....

>
> Ken KG0WX
> Denver, CO
>
>
>

1361. Total set up for sale! MA55, yaesu G-800, SteppIR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 06:36:22 UTC
From: specialist <callme@yahoo.com>
Message-ID: <Gt%Pc.202737$a24.186157@attbi_s03>
Source record: 91382

Greetings!
Please contact me if anyone is interested in purcasing the total set up or separately:
Tubular Tower MA-55 with 11 ft extension
Yaesu Rotator G-800 DXA with all the cabling
SteppIR 3 ELE with additional 6m element
RF and Control Cables
Even K-2 has to go.... I LOVE the equipment and I won every competition in NW region that I entered QRP. Placed top 10 in the country and world.
Everything is in excellent condition and working order. Everything is just over 1 yr old. My wife decided to buy a new hose in one of those restricted developements.
I am located in Bellevue, WA. Please contact me by e-mail or check the pictures on the web page www.qrpclub.com
work number 800-627-6982
Eugene KH7YD/w7
kh7yd@yahoo.com
www.qrpclub.com

1362. Re: Steppir antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 08:24:33 UTC
From: Thierry <"to answer direct see http">
Message-ID: <41109d42$1@news.vo.lu>
Source record: 91383

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:pJidnZwYPfMJtY3cRVn-sQ@comcast.com...
> Thierry,
>
> I am not familiar with your tower, but gather that the cage comes down the
> side. Isn't there some heading of the antenna that would let you do this?
> Maybe rotated 45 degrees to the tower face, with the boom fastened to the
> side of the mast away from the tower. I wonder how accurate your 50 cm
> number was. Could it end up beong 5 or 10 cm?

Hi Tam,

Here is an image during the building of the Hummel tower
http://www.astrosurf.com/lombry/Radio/tower-section-ginpole.jpg
As you see the mast is at left.
We thougth to rotate the antenna of 45 deg to move teh central element away
from the tower but its is difficult
If we install a 3-ele beam, in almost all cases the central element is in
the passage when lowering the beam.
We have to move the central element of about 50 cm or so to the parasitic
elements (the tower width is 50 cm, 20") to prevent this problem.
Steppir as well a 4 element beam but the boom is huge, 10m I think, and no
really cheap...
So up to now we have no solution without modifying the F/B ratio of the
beam, or to look at another brand... easier to handle and cheaper.

Thierry, ON4SKY

>
> Tam/WB2TT
> > > Thierry, ON4SKY
> > > http://www.astrosurf.com/lombry
> > >
> > >
> >
> >
>
>

1363. Re: HF/6 meter duplexer? Anywhere?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 10:25:38 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nbrsgFvigq4U1@uni-berlin.de>
Source record: 91384

"Mike" <km6ab@pacbell.net> wrote in message
news:r7ZPc.72$nB3.41@newssvr27.news.prodigy.com...
> On the Z-100 thought,
> I had a problem using a Z-100 near a computer monitor because RFI was
> getting into the HF and 6m receive through the plastic Z-100 case. I had
> a roll of self adhesive copper tape on hand and coated the entire inside
> of the case and it pretty much cured the RFI problem. Now only 6m has a
> slight increase in noise compared to the Z-100 out of the circuit. I
> think anything you can do to shield the Z-100 case is a step in the
> right direction.
> Mike

Thanks, Mike - I'm aware of that issue - kinda wish I still had my trusty
Z11
but then my FT-857D would smoke it, literally! My PC makes enough noise,
what with the covers removed so a box floor fan can blow air through it -
it's
a very high end machine and even with 4 case fans, 2 CPU fans, 1 coproceser
fan, 2 video fans, 2 fans on each of the three 250g hard drives and intake &
exhaust fans on the 500w power supply, I was still getting MB temps around
145 deg F and CPU temps around 148 deg F. I took off the case covers and
placed a big honking box fan blowing air cross wise through the whole
system.
That did it - CPU temp now 106, PS exhaust temp is 6 degrees above ambient
room temp..

Caig industries has a lot of neato products for electronics nuts like me - I
use
thier "DeOxit" contact cleaner on everything from PC connectors to my
model railroad - 'stuff is great!

They also make a copper conductive coating paint:

http://shopping.netledger.com/s.nl/c.ACCT113328/sc.2/category.182/it.A/id.1632/.f

I've heard of several OM's using this to coat and sheild the inside of the
Z100.

73's de Ken KG0WX

1364. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 14:25:04 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <4l6Qc.227$9o6.140@newssvr23.news.prodigy.com>
Source record: 91385

I'm curious about the 18 feet mentioned. Can anyone shed any technical
light on that?
tnx

--
73
Hank WD5JFR
"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:r8OPc.185833$tH1.8524115@twister.southeast.rr.com...
>
> "J999w" <j999w@aol.com> wrote in message
> news:20040802211506.26512.00002826@mb-m03.aol.com...
> > >As reported it is by definition 2:1.
> > >
> >
> > I thought that maybe he's actually _measured_ the SWR and has a problem.
> >
> > jw
> > k9rzz
> Yes I did actually measure the SWR. I was also trying to convey that I was
> not trying to change the SWR by changing the cable length. I was concerned
> that of 100 ohms or 25ohms one may be a better load for the TX. After some
> testing last night and this morning there does seem to be a difference,
> Modulation is a little better when the TX sees 100 ohms. I suspect there
may
> be even more difference if the SWR were higher. Is this why CB antenna
> manufactureres recommend using 18ft(3/4 wl) of coax with their antennas.
> Perhaps there is a little truth to the myth.
>
>

1365. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 15:18:52 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4110FE5C.8050302@psu.edu>
Source record: 91386

Daryl Krupa wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote in message
news:<410f0a95$1_1@corp.newsgroups.com>...
>
>>Mike Coslo wrote:
>>
>>> Right, that's how I understand it. But what about the people that
>>>know that the flood covered the entire earth?
>>
>>If you had been living on the shores of the fresh water Black Sea,
>>you would also have reported that it covered the entire earth.
>
>
> Mike and Cecil:
>
> Ballard admits defeat:
>
> <QUOTE>
> "We were not able to get a smoking gun," said Robert Ballard,
> the underwater explorer and discoverer of the Titanic, who
> led the $5 million Black Sea expedition last July and August.
> < ... >
> Also, scientists found nothing that could have established
> whether the site was a human settlement.
> "We didn't find a farmer or his tools," Ballard said.
> <END QUOTE>
>
> http://tinyurl.com/599l4
>
> OR
>
> http://tinyurl.com/4njq8
>
> OR
>
>
http://hosted.ap.org/dynamic/stories/B/BLACK_SEA?SITE=NCGRE&SECTION=HOME&TEMPLATE=DEFAULT
>
> Daryl Krupa

I'm not 100% sure where you are going with this thing, Daryl. As to
the exact details of when a flood happened, I'll leave that to the
experts. From what I can gather from the articles, the point is that
Ballard didn't find the elusive "farmer". He does note that they found

an ancient shore, and the story notes that scholars agree that a flood happened, some say catastrophically, some say gradual. My whole premise in this is that whatever happened, there was no flood that covered the entire planet so that no dry land was left.

- Mike KB3EIA -

1366. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 16:22:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r612h0lcmhqfrvkhu14d999tld17fnud3j@4ax.com>
Source record: 91387

On Wed, 04 Aug 2004 11:18:52 -0400, Mike Coslo <mjc5remove@psu.edu>
wrote:

> He does note that they found
>an ancient shore, and the story notes that scholars agree that a flood
>happened, some say catastrophically, some say gradual. My whole premise
>in this is that whatever happened, there was no flood that covered the
>entire planet so that no dry land was left.

Hi Mike,

History is written by the survivors, as the saying goes and where
there were floods, there were flood myths. However, one may discern
an exception to this rule in that these myths were oral long before a
written tradition was invented.

Being oral, they are undoubtedly Ice-Age originated. Here in
Washington/Montana/Idaho/Oregon, we had our own Great Flood. The
Glacial Lake Missoula filled behind the ice dam of the southern extent
of the polar ice cap. When the hydrostatic pressure at the bottom of
the lake at 2000 feet deep with 500 cubic miles of water behind it
broke the dam, the water washed out the eastern half of Washington and
carved the Columbia gorge between Washington and Oregon (also creating
the Willamette valley).

The outflow at the Montana end was about 8 to 10 cubic miles of water
per hour. Further toward the Columbia Gorge (which was stripped of
all topsoil to a level of 600 feet), temporary 1000 foot deep lakes
were created as the scabland plains area drained at a more sedate rate
of 40 cubic miles a day. When the lake emptied, the Arctic cap
re-asserted its closure at the mouth of the valley and the lake filled
again. Then it drained catastrophically again. This happened between
25 and 40 times!

This all began about 16000 years ago when human migration has been
confirmed to have been occurring in this vicinity. Needless to say
this predates writing, and given that the written tradition in this
region has been destroyed by weather over the centuries, that avenue
has been tenuous as a record.

Who knows, if the record had survived, there would be a Hiawatha story
of the great canoe. American Indian culture could have thrived and
moved their religion eastward to indoctrinate the heathen tribes of
Europe and today we would all celebrate communion with Peyote buttons
and Mescal.

73's
Richard Clark, KB7QHC

1367. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 17:11:56 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <wN8Qc.9013$9Y6.5561@newsread1.news.pas.earthlink.net>
Source record: 91388

"Howard Eisenhauer" <howarde@REMOVECAPShfx.eastlink.ca> wrote in message
news:3c70h0pog2eqolupm3nhrjmqfnoekqd8hi@4ax.com...
> On Mon, 02 Aug 2004 19:47:21 -0700, Howard <mensch90249> wrote:
>
> >On Mon, 02 Aug 2004 23:23:35 -0300, Howard Eisenhauer
> ><howarde@REMOVECAPShfx.eastlink.ca> wrote:
> >
> >>Let me check a minut... OH!- I'm Howard :).
> >>
> >>-Howard.
> >>
> >>On Mon, 02 Aug 2004 11:35:04 GMT, "H. Adam Stevens, NQ5H"
> >><NQ5H@ARRL.net> wrote:
> >>
> >>>who's howard?
> >>
> >>You guys can't be Howard, I'm Howard. Now, if all three of us are
> >>balding, graying and with beard & glasses we might have an actual
> >>coincidence.
> >>
> >>One of the other Howards
> >
> > Hi Howard!
> >
> > Howard!
> >
Well I was baldING when I was 23 and that was a long time ago.
Something about working around UHF TV transmitters.....
But a check of the fairly recent photo @QRZ shows that I qualify.
Other than just having the "H." for my name.
So Hi Howards!
H.

1368. Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 17:19:41 UTC
From: Dave <Devarim@hotmail.com>
Message-ID: <1d2437b33f0921c591c7953c98063ce4@news.meganetnews.com>
Source record: 91389

Hi all,

I have limited space for an antenna, and in order to get any height, it has to be an inverted vee configuration. I have enough space to put up a full-length 40m inverted vee, with the center about 22 feet up.

But if I feed it with coax, it will ONLY ever be a 40 meter (and 15 meter) antenna - since I only get ONE antenna (sayeth the XLY), that will limit my band access.

So what if I still put up the VEE cut for 40m, but feed it with a single wire attached at the center, then to my tuner's single-wire input.... would that still be easy to load on 40, while allow the tuner to load it on other bands?

Comments?

Dave

1369. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:18:21 UTC
From: Dave <Devarim@hotmail.com>
Message-ID: <5f22bee051f436098a57afc628a1d420@news.meganetnews.com>
Source record: 91391

> Put up as much wire as you can in your V, and feed it with ladder line
> and a tuner. A single line to a V is not the way to go.
>
> Your V will split in the middle, and each wire from the ladder line
> will go to one of the wires at the split. This will work multiple bands.

Hi Mike - I have a nice tuner I'd like to keep using - it's a Kenwood AT-180 but alas it doesn't have a balanced wire input - only coax and single wire. What about running ladder line down the house, then to a balun in a box on the outside to a very short coax to the tuner?

And yes, I think antennas are attractive :-) I'm sure I'll get more antennas as time goes on - it's a brand new house, so she's a little touchy still :-)

Dave

1370. Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:30:01 UTC
From: Dave <Devarim@hotmail.com>
Message-ID: <71e36daf66252ade5994154dc5b5b606@news.meganetnews.com>
Source record: 91392

Question related to my other post:

What interaction would there be to feed a 40-meter
dipole and 20-meter dipole with a single 50-ohm coax
cable? That way I'd get 40, 20, and 15 all on one cable...
Seems it should work - on the resonant antenna will load,
but I'm sure the lengths would need to be slightly different
than a single dipole on the coax feeder.

Also, what if I were to short out the coax as an option,
and try to load the entire thing using the single wire
terminal on my Kenwood tuner?

Thanks!

Dave

1371. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:34:38 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41112C3E.4010803@psu.edu>
Source record: 91390

Dave wrote:
> Hi all,
>
> I have limited space for an antenna, and in order to get
> any height, it has to be an inverted vee configuration. I have
> enough space to put up a full-length 40m inverted vee, with
> the center about 22 feet up.
>
> But if I feed it with coax, it will ONLY ever be a 40 meter
> (and 15 meter) antenna - since I only get ONE antenna
> (sayeth the XLY), that will limit my band access.
>
> So what if I still put up the VEE cut for 40m, but feed it with
> a single wire attached at the center, then to my tuner's
> single-wire input.... would that still be easy to load on
> 40, while allow the tuner to load it on other bands?

Put up as much wire as you can in your V, and feed it with ladder line and a tuner. A single line to a V is not the way to go.

Your V will split in the middle, and each wire from the ladder line will go to one of the wires at the split. This will work multiple bands. I'll probably catch flak on this, but MFJ makes some nice inexpensive tuners that are great to start out with.

You'll have one antenna, and the wife will be content. Okay, you'll just have one antenna. But when you want to put up more - and you will - just tell here you are thinking about ditching Ham radio, and taking up a new hobby..... hanging out at bars and carousing with lowlife. Too many S.O.'s seem to be *way* too obsessed with how "ugly" sntennas are. I personally find them to be beautiful, slender pieces of art.

- mike KB3EIA -

1372. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:54:49 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cerbi8$25i$1@newshost.mot.com>
Source record: 91396

"Dave" <Devarim@hotmail.com> wrote in message
news:1d2437b33f0921c591c7953c98063ce4@news.meganetnews.com...
> Hi all,
>
> I have limited space for an antenna, and in order to get
> any height, it has to be an inverted vee configuration. I have
> enough space to put up a full-length 40m inverted vee, with
> the center about 22 feet up.
>
> But if I feed it with coax, it will ONLY ever be a 40 meter
> (and 15 meter) antenna - since I only get ONE antenna
> (sayeth the XLY), that will limit my band access.
>
> So what if I still put up the VEE cut for 40m, but feed it with
> a single wire attached at the center, then to my tuner's
> single-wire input.... would that still be easy to load on
> 40, while allow the tuner to load it on other bands?
>
> Comments?
>
> Dave

Answer #1:
Nope, perhaps.
You describe (sort-of) a top loaded (with two 32 foot wires), 20' vertical, where some of the vertical is probably inside your shack. The tuner may be able to tune it on several bands if you don't mind warming the cockles of your heart.

I use my 40M inverted Vee (@ 35 ft.) on 40, 30 15, 17 (Even talked from Illinois to the Carolinas on 75, but not well). It IS fed with coax & a tuner. Is it great? Don't know, but I've worked Europe on 17 and the US on 40, 15 & 17.

A more popular and probably better option is to feed it with balanced line (300 or 450) and a balanced tuner. Actually, once you have the feed & tuner, you could then make it longer (whatever space you have) and possibly get better performance on 75 & 20 & 10. I say better on 75 due to the increased length because it is closer to a 1/2 wave and on 20 & 10 because the feed point impedance at the center will come down some since the halves are not exact multiples of a half wave.
73
--
Steve N, K,9;d, c. i My email has no u's.

1373. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:56:40 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cerbln$269$1@newshost.mot.com>
Source record: 91398

Is this the Monty Python skit, or am I in the wrong chat-group?

--
Steve N, K,9;d, c. i My email has no u's.

"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:wN8Qc.9013$9Y6.5561@newsread1.news.pas.earthlink.net...
>
> "Howard Eisenhauer" <howarde@REMOVECAPShfx.eastlink.ca> wrote in message
> news:3c70h0pog2eqolupm3nhrjmqfnoekqd8hi@4ax.com...
> > On Mon, 02 Aug 2004 19:47:21 -0700, Howard <mensch90249> wrote:
> >
> > >On Mon, 02 Aug 2004 23:23:35 -0300, Howard Eisenhauer
> > ><howarde@REMOVECAPShfx.eastlink.ca> wrote:
> > >
> > >>Let me check a minut... OH!- I'm Howard :).
> > >>
> > >>-Howard.
> > >>
> > >>On Mon, 02 Aug 2004 11:35:04 GMT, "H. Adam Stevens, NQ5H"
> > >><NQ5H@ARRL.net> wrote:
> > >>
> > >>>who's howard?
> > >>
> > >>You guys can't be Howard, I'm Howard. Now, if all three of us are
> > >>balding, graying and with beard & glasses we might have an actual
> > >>coincidence.
> > >>
> > >>One of the other Howards
> > >
> > > Hi Howard!
> > >
> > > Howard!
> > >
> > Well I was baldING when I was 23 and that was a long time ago.
> > Something about working around UHF TV transmitters.....
> > But a check of the fairly recent photo @QRZ shows that I qualify.
> > Other than just having the "H." for my name.
> > So Hi Howards!
> > H.
> >
>

1374. Re: Impedance mismatch question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:57:29 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cerbn8$26d$1@newshost.mot.com>
Source record: 91397

My take:
It reaches the rear bumper easily.

--
Steve N, K,9;d, c. i My email has no u's.

"Henry Kolesnik" <kolesnik@sbcglobal.net> wrote in message
news:4l6Qc.227$9o6.140@newssvr23.news.prodigy.com...
> I'm curious about the 18 feet mentioned. Can anyone shed any technical
> light on that?
> tnx
>
> --
> 73
> Hank WD5JFR
> "Jimmie" <Gfender@carolina.rr.com> wrote in message
> news:r8OPc.185833$tH1.8524115@twister.southeast.rr.com...
> >
> > "J999w" <j999w@aol.com> wrote in message
> > news:20040802211506.26512.00002826@mb-m03.aol.com...
> > > >As reported it is by definition 2:1.
> > > >
> > >
> > > I thought that maybe he's actually _measured_ the SWR and has a
problem.
> > >
> > > jw
> > > k9rzz
> > Yes I did actually measure the SWR. I was also trying to convey that I
was
> > not trying to change the SWR by changing the cable length. I was
concerned
> > that of 100 ohms or 25ohms one may be a better load for the TX. After
some
> > testing last night and this morning there does seem to be a difference,
> > Modulation is a little better when the TX sees 100 ohms. I suspect there
> may
> > be even more difference if the SWR were higher. Is this why CB antenna
> > manufactureres recommend using 18ft(3/4 wl) of coax with their antennas.
> > Perhaps there is a little truth to the myth.
> >
> >
>
>

1375. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 18:59:08 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cerbqb$29o$1@newshost.mot.com>
Source record: 91400

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:r612h0lcmhqfrvkhu14d999tld17fnud3j@4ax.com...
> On Wed, 04 Aug 2004 11:18:52 -0400, Mike Coslo <mjc5remove@psu.edu>
> wrote:
>
> > He does note that they found
> >an ancient shore, and the story notes that scholars agree that a flood
> >happened, some say catastrophically, some say gradual. My whole premise
> >in this is that whatever happened, there was no flood that covered the
> >entire planet so that no dry land was left.
>
> Hi Mike,
>
> History is written by the survivors, as the saying goes and where
> there were floods, there were flood myths. However, one may discern
> an exception to this rule in that these myths were oral long before a
> written tradition was invented.
>
> Being oral, they are undoubtedly Ice-Age originated. Here in
> Washington/Montana/Idaho/Oregon, we had our own Great Flood. The
> Glacial Lake Missoula filled behind the ice dam of the southern extent
> of the polar ice cap. When the hydrostatic pressure at the bottom of
> the lake at 2000 feet deep with 500 cubic miles of water behind it
> broke the dam, the water washed out the eastern half of Washington and
> carved the Columbia gorge between Washington and Oregon (also creating
> the Willamette valley).
>
> The outflow at the Montana end was about 8 to 10 cubic miles of water
> per hour. Further toward the Columbia Gorge (which was stripped of
> all topsoil to a level of 600 feet), temporary 1000 foot deep lakes
> were created as the scabland plains area drained at a more sedate rate
> of 40 cubic miles a day. When the lake emptied, the Arctic cap
> re-asserted its closure at the mouth of the valley and the lake filled
> again. Then it drained catastrophically again. This happened between
> 25 and 40 times!
>
> This all began about 16000 years ago when human migration has been
> confirmed to have been occurring in this vicinity. Needless to say
> this predates writing, and given that the written tradition in this
> region has been destroyed by weather over the centuries, that avenue
> has been tenuous as a record.
>
> Who knows, if the record had survived, there would be a Hiawatha story
> of the great canoe. American Indian culture could have thrived and

> moved their religion eastward to indoctrinate the heathen tribes of
> Europe and today we would all celebrate communion with Peyote buttons
> and Mescal.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
Gee. .... What if the "great flood" actually
--
Steve N, K,9;d, c. i My email has no u's.occurred during an ice age?

1376. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 19:05:16 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4111336C.4050006@psu.edu>
Source record: 91393

Dave wrote:
>>Put up as much wire as you can in your V, and feed it with ladder line
>>and a tuner. A single line to a V is not the way to go.
>>
>>Your V will split in the middle, and each wire from the ladder line
>>will go to one of the wires at the split. This will work multiple bands.
>
>
> Hi Mike - I have a nice tuner I'd like to keep using - it's a Kenwood
> AT-180 but alas it doesn't have a balanced wire input - only coax
> and single wire. What about running ladder line down the house,
> then to a balun in a box on the outside to a very short coax to
> the tuner?

Yup, that should work well.

> And yes, I think antennas are attractive :-) I'm sure I'll get more
> antennas as time goes on - it's a brand new house, so she's a
> little touchy still :-)

She'll get used to it, mine did! 8^)

- mike KB3EIA -

1377. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 19:25:01 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <wOydncP_aOuTpYzcRVn-pg@comcast.com>
Source record: 91394

"Dave" <Devarim@hotmail.com> wrote in message
news:71e36daf66252ade5994154dc5b5b606@news.meganetnews.com...
> Question related to my other post:
>
> What interaction would there be to feed a 40-meter
> dipole and 20-meter dipole with a single 50-ohm coax
> cable? That way I'd get 40, 20, and 15 all on one cable...
> Seems it should work - on the resonant antenna will load,
> but I'm sure the lengths would need to be slightly different
> than a single dipole on the coax feeder.
>
> Also, what if I were to short out the coax as an option,
> and try to load the entire thing using the single wire
> terminal on my Kenwood tuner?
>
> Thanks!
>
> Dave

I had run EZNEC on such a configuration a few weeks ago. What I have is:

1. a 20 m flat top dipole at 40 feet of length 34.1 feet.

2.A 40m inverted V, 66.8 feet long, supported by the 20m feedpoint, and
sloping down at 30 degrees.

The SWR is about 1.1:1 at 7.15 and 14.25. (The second dipole lowers the
impedance from 75 Ohms)

If you do this, you have to trim the 40m antenna first. I presently have a
40/17 m version of this up and working.

Tam/WB2TT

1378. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 19:26:40 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <QLaQc.244496$Oq2.161974@attbi_s52>
Source record: 91395

Howard Eisenhauer wrote:

> The ones *I* overhauled never had those problems buddy- ;>.
>
> H.
>
> On Tue, 03 Aug 2004 14:19:11 GMT, Dave Shrader
> <david.shrader@comcast.net> wrote:
>
>
>>And not that reliable! The old teletype machines would chew up tape,
>>develop stuck solenoids, and make noise like you never ...
>>

Well Howard, I just commented on the machine. But, how it was used also contributed to the problems ... we were punching and reading metallized mylar tape, not paper. Noise and wear and tear are not always the sole responsibility of the machines we use.

The USAF wanted 'permanent tape' [for whatever reasons].

1379. Re: Part 15 info need for broadcasting

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 19:29:25 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <pOaQc.245037$XM6.42888@attbi_s53>
Source record: 91399

We better ship you some prarie dogs. Don't want you to be deprived.

funkbastler wrote:

> On Mon, 2 Aug 2004 22:13:52 -0700, "Ed Price" <edprice@cox.net> wrote:
>
>
>>I must be missing something here.
>>You are in a very rural area, so you feel you don't need to comply with
>>broadcast radiated power restrictions.
>>You claim the signal never makes it to the nearest neighbor's house.
>>So what's the point in transmitting, if nobody receives the signal?
>>Are you doing some kind of subliminal suggestion on the prairie dogs?
>
>
> Power restrictions are in place to prevent interference. If I'm
> a couple of miles from anybody and transmit with 200 mW instead
> of 100 mW, I don't see a big problem.
>
> The point is that I can slip a small FM receiver in my pocket, put
> on some earphones, and listen to whatever I want to while I'm out
> in the pasture, in the barn, in the shop, or wherever else. (Why
> would I want to broadcast to the neighbors anyway? My ego isn't
> that big.)
>
> We have coyotes, foxes, deer, bobcats, and wild turkeys here, but
> no prairie dogs.
>

1380. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 19:50:35 UTC
From: K7MEM <k7mem@myrealbox.com>
Message-ID: <41113E0B.50304@myrealbox.com>
Source record: 91402

Dave wrote:
> Hi all,
>
> I have limited space for an antenna, and in order to get
> any height, it has to be an inverted vee configuration. I have
> enough space to put up a full-length 40m inverted vee, with
> the center about 22 feet up.
>
> But if I feed it with coax, it will ONLY ever be a 40 meter
> (and 15 meter) antenna - since I only get ONE antenna
> (sayeth the XLY), that will limit my band access.
>
> So what if I still put up the VEE cut for 40m, but feed it with
> a single wire attached at the center, then to my tuner's
> single-wire input.... would that still be easy to load on
> 40, while allow the tuner to load it on other bands?
>
> Comments?
>
> Dave

Another alternative is to make that dipole a trap dipole. I made one that covered 40, 20, 15, and 10 Meters. It was coax fed and did not require tuning when switching bands. It ended up being shorter than a standard 40 Meter dipole because of the trap shortening effect. They are a little difficult to tune initially but once there is no more work. OK, except for putting it back up again when the wind blows it down. But we won't go into that.

--
Martin E. Meserve
k7mem@myrealbox.com
http://www.k7mem.150m.com

1381. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 19:56:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <iff2h0th5guc4q40u8qi7ethle9rn3te4o@4ax.com>
Source record: 91401

On Wed, 4 Aug 2004 13:59:08 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

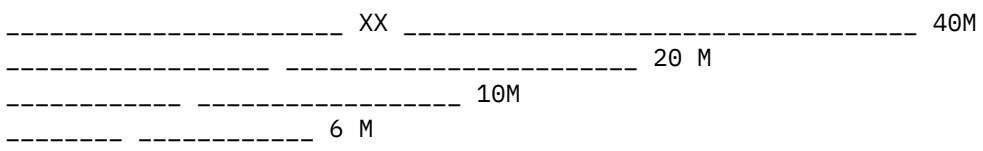
>Hi Richard,
> Gee. .... What if the "great flood" actually
>--
>Steve N, K,9;d, c. i My email has no u's.occurred during an ice age?

We would be treated to tales of Noah's Skidoo and the great blizzard?

1382. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 22:22:35 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <LkdQc.6576$AY5.6115@newssvr21.news.prodigy.com>
Source record: 91403

Dave- think be better off useing Flat rotor wire- to your coax. There was an article many years ago, in QST, I believe, that detailed what I describe : Run 2- 33-1/2 foot pieces (40 meter length) of that rotor wire to your end insulators. now, as this wire is 4- inline conductors, strio back 3 of these conductors to 16- 3/4 foot and cut off the excess to the endpoint insulators, now, from that strip 2 of the remaining to 8- 3/8 foot long this will be aprox. 10 meter, the middle would be for 20 meters . If six meters is desired, would be about 55 inchs, from the center for conductor #4, or could do similar for the correct lengths , for 30 meters, 17 meters, and 12 meters! In other words a 4 band dipole, the bulk of wires slightly bigger than a single conductor (about 1/4 inch wide), all in one run. All four wires are connected to the coax-- and the beauty of it is the rotor wire keeps all of them in 1 run! for your consideration- Jim NN7K



4 band dipole

Dave wrote:
> Hi all,
>
> I have limited space for an antenna, and in order to get
> any height, it has to be an inverted vee configuration. I have
> enough space to put up a full-length 40m inverted vee, with
> the center about 22 feet up.
>
> But if I feed it with coax, it will ONLY ever be a 40 meter
> (and 15 meter) antenna - since I only get ONE antenna
> (sayeth the XLY), that will limit my band access.
>
> So what if I still put up the VEE cut for 40m, but feed it with
> a single wire attached at the center, then to my tuner's
> single-wire input.... would that still be easy to load on
> 40, while allow the tuner to load it on other bands?
>
> Comments?
>
> Dave
>
>
>

1383. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 22:32:30 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <2udQc.11029$Jp6.4166@newsread3.news.atl.earthlink.net>
Source record: 91405

"K9SQG" <k9sqg@aol.com> wrote in message
news:20040803212426.15036.00000932@mb-m02.aol.com...
> Generally broadside but, depending on lengths and where it is fed, that
can be
> altered.

It was a simple, basic question. I gave him the simple, basic, answer.

Dan/W4NTI

1384. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 22:35:17 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <FwdQc.11031$Jp6.1088@newsread3.news.atl.earthlink.net>
Source record: 91404

"Dave" <Devarim@hotmail.com> wrote in message
news:1d2437b33f0921c591c7953c98063ce4@news.meganetnews.com...
> Hi all,
>
> I have limited space for an antenna, and in order to get
> any height, it has to be an inverted vee configuration. I have
> enough space to put up a full-length 40m inverted vee, with
> the center about 22 feet up.
>
> But if I feed it with coax, it will ONLY ever be a 40 meter
> (and 15 meter) antenna - since I only get ONE antenna
> (sayeth the XLY), that will limit my band access.
>
> So what if I still put up the VEE cut for 40m, but feed it with
> a single wire attached at the center, then to my tuner's
> single-wire input.... would that still be easy to load on
> 40, while allow the tuner to load it on other bands?
>
> Comments?
>
> Dave
>
>
>
I would get rid of the XYL and put up what you want. But.......if you just
can't do that......

Feed it center fed with ladderline. This to a good balanced tuner, should
do fine. Except on 80 and 160 without some other tricks.

End feeding is not good. Makes lots of RF in the house.

Dan/W4NTI

1385. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 22:57:19 UTC
From: K7SAM <2smoore@nemontel.net>
Message-ID: <W7idnfjUYPs074zcRVn-uQ@vnet-inc.com>
Source record: 91408

Have had a similar setup for years. Mine is on 40 and 80 meters.

Dipoles are mounted on a PVC pipe sticking out from the top of a 50 foot tower about 3 to 4 feet, horizontally. The antennas run basically north and south.

I put up the 80 running north and south and them pulled both ends slightly off to the west at each end. The 40 was run north and south and then both ends pulled slightly to the east at each end. Hope that makes sense.

Made them both a bit long and then started doing a lot of trimming. Trimmed the 80 a bit, then the 40, back to the 80, then back to the 40. There is some interaction so you can't really just do one and then the other. Used an MFJ Analyzer to check each trim as I went. Can't remember exactly what I ended up with but have been using it for years and it works just fine, no problems. Is there a better way to do it, I am sure there is, but, this is simple and does the job.

K7SAM

1386. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 23:06:47 UTC
From: jgboyles@aol.com
Message-ID: <20040804190647.04176.00001859@mb-m26.aol.com>
Source record: 91406

>It was a simple, basic question. I gave him the simple, basic, answer.

Well, the original poster did not give height, feedpoint position, ground conditions, surrounding objects ect..
I also think the answer to the radiation angle question should be in degrees above the horizon. If he asked about the radiation pattern of the delta loop, the broadside or end fire characteristics would be a proper response.
My answer (for what it is worth) to the orginal question is : "it depends".
K9SQG has my vote.

73 Gary N4AST

1387. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-04 23:10:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41116e3a_3@corp.newsgroups.com>
Source record: 91407

Dave wrote:
> So what if I still put up the VEE cut for 40m, but feed it with
> a single wire attached at the center, then to my tuner's
> single-wire input.... would that still be easy to load on
> 40, while allow the tuner to load it on other bands?

That would require a good ground plane as it would essentially
be a vertical antenna with a sloped top hat.

How about feeding the 40m Inv-V with 1/2WL of ladder-line?
That's about 60 ft on 40m. The characteristics on 40m will
essentially be the same as a coax fed Inv-V. And then you
can use it on all the higher HF bands with an antenna tuner.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1388. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 00:22:55 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <6cu2h0d76n6vjevpa1rtav0371sq8pvm2p@4ax.com>
Source record: 91409

On Wed, 04 Aug 2004 19:26:40 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Howard Eisenhauer wrote:
>
>> The ones *I* overhauled never had those problems buddy- ;>.
>>
>> H.
>>
>> On Tue, 03 Aug 2004 14:19:11 GMT, Dave Shrader
>> <david.shrader@comcast.net> wrote:
>>
>>
>>>>And not that reliable! The old teletype machines would chew up tape,
>>>>develop stuck solenoids, and make noise like you never ...
>>>
>
>Well Howard, I just commented on the machine. But, how it was used also
>contributed to the problems ... we were punching and reading metallized
>mylar tape, not paper. Noise and wear and tear are not always the sole
>responsibility of the machines we use.
>
>The USAF wanted 'permanent tape' [for whatever reasons].
>
Yeah, I know what you mean. Here in Canada the forces used the green
metalized stuff as well, although I always thought it was aluminium.
We only used it for stuff like pre-made address tapes where there
were daily messages always going out to the same bunch of stations.
It did tend to wear down the punches a bit, but we used the paper
stuff for regular traffic. After it had done it's job it went into
the Burn Bag, along with printouts, ribbons, used kleenexeseses, paper
coffe cups, chip bags & the occaisional beer bottle (hada love those
field exercises;>).

The computer I originally posted about was a 50's something USAF
design. By the time I got to it in the late 70's nobody had any idea
how it worked, we just had a hand compiled book put togeather by many
many people over many many years saying "If it's doing that, try
replacing this". By that time we were in the process of phasing that
equipment out anyhow, I don't think anybody was sad to see the end of
it :).

H. (No, the Other One)

1389. Re: Fightin' Words on R.R.A.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 00:23:30 UTC
From: Howard Eisenhauer <howarde@REMOVECAPShfx.eastlink.ca>
Message-ID: <cfv2h0du7t91g64oeeaspisla1v6c7kmii@4ax.com>
Source record: 91410

On Wed, 4 Aug 2004 13:56:40 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>Is this the Monty Python skit, or am I in the wrong chat-group?

RIGHT!

1390. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 01:52:46 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <411192f1$0$22718$39cecf19@news.twtelecom.net>
Source record: 91411

Richard Clark wrote:
>
> Hi Mike,
>
> History is written by the survivors, as the saying goes and where
> there were floods, there were flood myths. However, one may discern
> an exception to this rule in that these myths were oral long before a
> written tradition was invented.
>
> Being oral, they are undoubtedly Ice-Age originated. Here in
> Washington/Montana/Idaho/Oregon, we had our own Great Flood. The
> Glacial Lake Missoula filled behind the ice dam of the southern extent
> of the polar ice cap. When the hydrostatic pressure at the bottom of
> the lake at 2000 feet deep with 500 cubic miles of water behind it
> broke the dam, the water washed out the eastern half of Washington and
> carved the Columbia gorge between Washington and Oregon (also creating
> the Willamette valley).
>
> The outflow at the Montana end was about 8 to 10 cubic miles of water
> per hour. Further toward the Columbia Gorge (which was stripped of
> all topsoil to a level of 600 feet), temporary 1000 foot deep lakes
> were created as the scabland plains area drained at a more sedate rate
> of 40 cubic miles a day. When the lake emptied, the Arctic cap
> re-asserted its closure at the mouth of the valley and the lake filled
> again. Then it drained catastrophically again. This happened between
> 25 and 40 times!

<snip>

>
> 73's
> Richard Clark, KB7QHC

I remember reading, but not the details, that this high speed flood
ripped across a considerable distance, maybe hundreds of miles, each
time it occured. Do you know the distance involved?

tom
K0TAR

1391. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 02:21:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e163h0t4n3seh4r22depkc1ujrerajqvue@4ax.com>
Source record: 91412

On Wed, 04 Aug 2004 20:52:46 -0500, Tom Ring <news0000@taring.org>
wrote:

>I remember reading, but not the details, that this high speed flood
>ripped across a considerable distance, maybe hundreds of miles, each
>time it occured. Do you know the distance involved?

Hi Tom,

From Missoula to Astoria basically. Probably 600 miles in the twists
and turns across the Columbia basin out of the Rockies. First a
northwest flow, turning southwest in the Idaho panhandle and then
westerly at the mid-Washington and mid-Oregon border.

73's
Richard Clark, KB7QHC

1392. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 04:02:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10h38pl9o1542a3@corp.supernews.com>
Source record: 91413

The floods also flowed south down the Willamette Valley, leaving car-sized boulders ("erratics") here and there. Much of the rich farmland soil in the valley came from eastern Washington, an area called the "scablands", which is still almost devoid of topsoil.

As Richard mentioned, there were several tens of floods. After the huge lake emptied, the ice dam re-formed. It held until the lake refilled and applied too much pressure, then it broke and the lake emptied again, repeating the process. The high-water marks can still be seen high on the hills behind Missoula. It was one hell of an oscillator!

Roy Lewallen, W7EL

Richard Clark wrote:
> On Wed, 04 Aug 2004 20:52:46 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
>
>>I remember reading, but not the details, that this high speed flood
>>ripped across a considerable distance, maybe hundreds of miles, each
>>time it occured. Do you know the distance involved?
>
>
> Hi Tom,
>
> From Missoula to Astoria basically. Probably 600 miles in the twists
> and turns across the Columbia basin out of the Rockies. First a
> northwest flow, turning southwest in the Idaho panhandle and then
> westerly at the mid-Washington and mid-Oregon border.
>
> 73's
> Richard Clark, KB7QHC

1393. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 04:27:57 UTC
From: David Cook <nospam.davepc4@at.comcast.net>
Message-ID: <hHiQc.209120$%_6.134231@attbi_s01>
Source record: 91414

I have that exact antenna that I've used for years. It's not up right now, but I often take it out for camping/Field Day. Here at home I had it with one leg of the 40 meter dipole horizontal and the 20 meter leg on that side on a slope. The opposite legs were the opposite configuration. This gave it a semblance of symmetry, although I don't know if that made a difference. The trick I used for 15 was to tie in a couple of capacitance hats at the 1/4 wavelength points for 15 meters on the 40 meter dipole, as shown in the ARRL Wire Antenna Classics book on page 1-2. Those were a little tricky to get right, but once set it worked very well on 15. I also have a balun at the center. It's a great antenna - three bands on four wires - and I had great performance and excellent SWR.

73 and good luck with yours,
-- Dave, WA0TTN

"Dave" <Devarim@hotmail.com> wrote in message
news:71e36daf66252ade5994154dc5b5b606@news.meganetnews.com...
> Question related to my other post:
>
> What interaction would there be to feed a 40-meter
> dipole and 20-meter dipole with a single 50-ohm coax
> cable? That way I'd get 40, 20, and 15 all on one cable...
> Seems it should work - on the resonant antenna will load,
> but I'm sure the lengths would need to be slightly different
> than a single dipole on the coax feeder.
>
> Also, what if I were to short out the coax as an option,
> and try to load the entire thing using the single wire
> terminal on my Kenwood tuner?
>
> Thanks!
>
> Dave
>
>

1394. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 05:53:08 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <WWjQc.7940$Ns.7719@bignews5.bellsouth.net>
Source record: 91415

The effects of the flood has been documented -
the high water mark caused the ancient ham radio towers to rust up to a height of 40 feet.
the guy wires were washed away, and the towers came tumbling down - right across the walls of Jerry-Ko (the ham's next door neighbor).

"Roy Lewallen" <w7el@eznec.com> wrote in message news:10h38pl9o1542a3@corp.supernews.com...
> The floods also flowed south down the Willamette Valley, leaving
> car-sized boulders ("erratics") here and there. Much of the rich
> farmland soil in the valley came from eastern Washington, an area called
> the "scablands", which is still almost devoid of topsoil.
>
> As Richard mentioned, there were several tens of floods. After the huge
> lake emptied, the ice dam re-formed. It held until the lake refilled and
> applied too much pressure, then it broke and the lake emptied again,
> repeating the process. The high-water marks can still be seen high on
> the hills behind Missoula. It was one hell of an oscillator!
>
> Roy Lewallen, W7EL
>
> Richard Clark wrote:
> > On Wed, 04 Aug 2004 20:52:46 -0500, Tom Ring <news0000@taring.org>
> > wrote:
> >
> >
> >>I remember reading, but not the details, that this high speed flood
> >>ripped across a considerable distance, maybe hundreds of miles, each
> >>time it occured. Do you know the distance involved?
> >
> >
> > Hi Tom,
> >
> > From Missoula to Astoria basically. Probably 600 miles in the twists
> > and turns across the Columbia basin out of the Rockies. First a
> > northwest flow, turning southwest in the Idaho panhandle and then
> > westerly at the mid-Washington and mid-Oregon border.
> >
> > 73's
> > Richard Clark, KB7QHC

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1395. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 06:01:33 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040805020133.26478.00003290@mb-m03.aol.com>
Source record: 91416

I have found this thread interesting, but as a Christian minister, I use ham radio as a stresss outlet. Many people hold to deep religious beliefs (including me) and some comments can cause flame wars. Please be respectful of other beliefs, and let's return this thread to ham radio and antenna's. For a discussion of creation and creation science (2 different entities, as creation teaches theology, and creation science focuse on the science) let's move to another forum. BTW not all creationists or creation scientist believe in a young earth, as some hold to an old earth. And not all evolutionists are atheist as some believe in theistic evolution. We have about 8 different systems based around these 2. Check out answers in genesis, and Institute for Creation Research for more info. And too see how the flood could have been global. But, that is a discussion for Sunday's sermon, which is on Creation.

My questions is, if the speed of light is slowing down, then does the wavelength and frequency shift, and if so in which direction? It has been over 20 years since college physics and astronomy...Memory is not what it used to be. If I remember correctly, a relationship exists between speed and frequency. Also, does the speed of radio waves change? E=MC^2 would show that energy is decreasing, which runs counter to the 3 laws of thermodynamics. Where is the missing energy? This could cause a major shift in scientific thinking and laws....Science laws are not absolute. WOW, let me ponder that.

Randy KA4NMA

1396. Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 09:42:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cesveu$8vt$1@hercules.btinternet.com>
Source record: 91417

NOW AVAILABLE ** New Program "RADIALS2.exe"

This program takes a fresh, revolutionary look at the design and performance of a set of shallow-buried ground radials. Gone at last are the days when 118.5 was a sacred number.

A radial wire is considered as a lossy transmission line, there being no point in having it any longer than that at which its input impedance Zin has converged on its characteristic impedance Zo. The current flowing in the line at that distance from the input end is clearly small enough not to warrant extending the radial any further. With a crude knowledge of the resistivity and permittivity of the soil the greatest practical length of radial wires can be calculated. The number of radials can then be estimated on the logical grounds of economics versus antenna + transmitter radiating efficiency.

Download program RADIALS2, 53 kilobytes, in a few seconds from website below and run immediately.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

1397. Re: S - Y Parameter conversion with Smith Chart

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 11:19:50 UTC
From: Fred Bloggs <nospam@nospam.com>
Message-ID: <411217CC.1070402@nospam.com>
Source record: 91418
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur,rec.radio.amateur.antenna,sci.electronics.design

>
> I see in Chris Bowick's book on RF circuit design, he provides 8 quite
> long-winded formulas for converting between S and Y parameters and
> vice-versa. I'm always prone to making careless errors (particularly
> with signs) with these kind of equations, so I was wondering if
> there's a simpler, graphical method for conversion using the Smith
> Chart. After all, that's what it was devised for - the elimination of
> computational errors in such calculations.
> I've tried using the vastly simpler rectangular/polar co-ordinate
> conversion formulas, but they don't plot correctly on the Smith Chart,
> it seems.
> So, does anyone know of a simple graphical way to do it on the SC?

It is possible to design a nomograph for anything- but I'm not going to
waste any time on your behalf because you're a low-life moron...-)

1398. Re: Ok, I have a brain teaser for you.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 13:07:29 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <N9mdncDZ0cuQrl_cRVn-jQ@comcast.com>
Source record: 91419

It's been an interesting evening.
I've made some interesting observations.

I was able to get an Etherwave on a "scratch and dent" sale, that turned out to have a bad solder joint to one of the pitch coils... :) It took longer to take the cover off, than to fix it. But, it was a very significant discount, so I'm a really happy camper.

With the Theremax, the antenna coils were pretty much ignored, and it wasn't clear to me how they should be designed from the information that I've found on the web.

I've been able to measure out what the Etherwave pitch antenna is, using my Tek 7L5 spectrum analyzer, and again the theremin proves to have surprisingly complex behavior.

I'm sure this applies to most theremin designs, as they all seem to have the basic structure of a parallel resonant tank circuit in the pitch osc, and a series LC network in the antenna. I'm sure that some don't take advantage of the behavior that I've noticed here, to their apparent disadvantage.

Conventionally measuring the antenna circuit proves to be difficult, because even the input impedance of a Tek scope probe is way beyond the effects that are produced by operating the instrument normally. Attaching the probe drastically detunes the circuit. Still, with special techniques, it is possible to examine the circuit, relatively non-intrusively. As it turns out, the spectrum analyzer is only needed when you don't already know how to look for this effect, or what causes it.

Background:

The antenna and it's loading coils form a series resonant circuit at some frequency.
I had thought, and now confirmed using the Etherwave, that the behavior of the pitch control would be affected significantly by how the pitch osc is tuned relative to the series resonant point (SRP) of the antenna system.

Most theremin circuits that I have seen, have the same basic structure.
They have a parallel resonant tank circuit in the pitch oscillator, and the antenna and antenna coil form a series resonant circuit.

The parallel resonant pair presents maximum impedance, nearly purely resistive, at it's resonant point. If the antenna circuit was dead on resonant at the same frequency, then it would also present some level of purely resistive impedance.

The interesting thing, is that the antenna circuit presents it's lowest impedance at resonance, and the tank circuit presents it's highest impedance at resonance. So, the oscillator cannot function properly (if at all), if both circuits are tuned to, or nearly to, the same frequency.

What happens:

The behavior of the pitch oscillator is very interesting when tuned near the antenna resonant point. Starting at the lowest frequency, it moves smoothly up through it's range, then takes a sudden jump of about 10-20kHz when we cross the antenna resonant point. Due to the interactions, the resonant point is somewhat indistinct, but we can locate it closely enough to improve the system performance.

Since the pitch oscillator becomes unstable at the point where it hits the antenna resonant frequency, this obviously would be a catastrophic place to tune your pitch oscillator to. :)

So, you get to choose wether to place your pitch oscillator above or below the antenna resonant point. So, I investigated where the range is, relative to this point.
I found that which side you select, and exactly where you select, makes a distinct difference.

I tried a number of points, starting about 30kHz below the resonant point, and ending about 30kHz above the resonant point. Beyond these points, the difference diminishes rapidly, until you have very similar control behavior above, or below the resonant point of the antenna system.

With the oscillator tuned just below the antenna resonance, the control range is somewhat compressed. The closer you get to the antenna resonance, the more compressed it becomes.(!) With the oscillator just above the resonance, the control range is expanded.
The closer you get to the antenna resonant point, the more expanded the control range becomes.

This makes some sense to me from an antenna tuning/tesla coil perspective. On the low side (pitch osc below antenna resonance), the antenna is slightly capacitive. A given increase in your hand capacitance lowers the self resonant point of the antenna, which makes it LESS capacitive, so the tuning range becomes compressed. On the high side, the antenna is slightly inductive, so you make it less inductive and more capacitive as you approach the antenna. These two changes add to each other, and this explains the expanded range. Different antenna and coil designs will react to different degrees, but the basics should hold.

It seems that the shift in the antenna self resonant frequency works in conjunction with the hand capacitance, but only if you are on the high side of the antenna's self resonant point, and fairly close to that point

The coils in the Etherwave are still a compromise, being physically very small, and having a lot of parasitic capacitance. I'll be looking at that soon.

This behavior near the antenna resonance may also explain some squirrely behavior that I saw when first setting up the Theremax.

There is also an area of aluminum tape near the pitch antenna. It is interesting, in that this would not present any sort of "ground plane", even at far higher frequencies. I assume it is being used as a capacitor against the antenna, which could be intended to further increase the control range, by swamping out some of the hand capacitance. I'm not sure on this point yet.

1399. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 14:11:13 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0408050611.20fda00f@posting.google.com>
Source record: 91420

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<cesveu$8vt$1@hercules.btinternet.com>...
> NOW AVAILABLE ** New Program "RADIALS2.exe"
> ...
> Download program RADIALS2, 53 kilobytes, in a few seconds from website below
> and run immediately.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....

Hi Reg,
TNX for more new programs. I find your ham software very useful.
WARNING: The code on your page has probably been tampered with. When I
left-click directly on the RADIALS2 link, I am redirected to a strange
server. When I right-click, the "Properties" seem to be OK, but an
attempt to "Save Target" fails. I had to hand-type the proper path to
RADIALS2.EXE into the MSIE address line, then I got the software.

BR from Ivan

1400. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 14:16:50 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cetfl2$d87$1@newshost.mot.com>
Source record: 91322

"Dave" <Devarim@hotmail.com> wrote in message
news:71e36daf66252ade5994154dc5b5b606@news.meganetnews.com...
> Question related to my other post:
>
> What interaction would there be to feed a 40-meter
> dipole and 20-meter dipole with a single 50-ohm coax
> cable? That way I'd get 40, 20, and 15 all on one cable...
> Seems it should work - on the resonant antenna will load,
> but I'm sure the lengths would need to be slightly different
> than a single dipole on the coax feeder.
>
> Also, what if I were to short out the coax as an option,
> and try to load the entire thing using the single wire
> terminal on my Kenwood tuner?
> Thanks!
> Dave

It's also done with the wires all parallel ro each other, but spaced
apart by 8-12 inches. Pretty sure there are pix on the
--
Steve N, K,9;d, c. i My email has no u's.web somewhere.

1401. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 14:41:41 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <FGrQc.176580$OB3.80418@bgtnsc05-news.ops.worldnet.att.net>
Source record: 91321

Ivan,

I do not believe it is anything serious. The only problem I found was
that the link says "Radials2.exe", but the actual file is "radials2.exe"

It is simply a matter of capitalization. Some servers care, some do not.

73,
Gene

OK1SIP wrote:
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:<cesveu$8vt$1@hercules.btinternet.com>...
>
>>NOW AVAILABLE ** New Program "RADIALS2.exe"
>>...
>>Download program RADIALS2, 53 kilobytes, in a few seconds from website below
>>and run immediately.
>>----
>>...
>>Regards from Reg, G4FGQ
>>For Free Radio Design Software go to
>>http://www.btinternet.com/~g4fgq.regp
>>...
>
>
> Hi Reg,
> TNX for more new programs. I find your ham software very useful.
> WARNING: The code on your page has probably been tampered with. When I
> left-click directly on the RADIALS2 link, I am redirected to a strange
> server. When I right-click, the "Properties" seem to be OK, but an
> attempt to "Save Target" fails. I had to hand-type the proper path to
> RADIALS2.EXE into the MSIE address line, then I got the software.
>
> BR from Ivan

1402. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 15:04:10 UTC
From: KAZeringue <kazeringue@aol.com>
Message-ID: <K%rQc.186776$tH1.8721820@twister.southeast.rr.com>
Source record: 91324

Ditto the three previous responses.

My two cents worth is that the amount of interaction depends on how near to one another the different dipole legs are.

If you run one dipole north/south, and the other east/west (i.e., 90 degree physical separation between the dipoles) there will be very little interaction.

If the legs parallel one another, seperated with spacers of some sort(or just hanging, one below the other), there will be more interaction.

If the legs are parallel, and separated by about 6 inches, there will be more interaction than if the wires are parallel and separated by about 12 inches. If the wires are to parallel, putting a spacer close to the feedpoint on each leg helps. I've seen articles on twinlead dipoles, but the SWR bandwidth on them must be pretty sharp.

You can multiband the bands that are not harmonics pretty easily. For example, 40 and 20 have more interaction than would 40 and 30, or 20 and 17.

I had a dipole for 80/40/20 up for a year or so. The SWR bandwidth was sharp on all bands, but a tuner could handle it easily. I now have seperate 80 and 40 meter antennas, but use multiband dipoles for 20/17 and 15/10.

QST had a wire yagi article about 2 years back based on three dipoles for 20/15/10. I built one for just 15/10, works great, and I can pull the dipole off quick if I need to.

Experiment away, but its easier to tune a multiband dipole for SWR in its final location. Lots of FB antenna fun.

73
Keith, W4KAZ

1403. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 15:14:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41125000$1_3@corp.newsgroups.com>
Source record: 91323

Theplanters95 wrote:
> BTW not all creationists or creation scientist believe in a
> young earth, as some hold to an old earth. And not all evolutionists are
> atheist as some believe in theistic evolution.

Creationists invariably believe in "First Cause". But there is a
logical fallacy associated with such a belief. If "everything that
exists" has to have a cause, then God (as part of "everything that
exists") has to have a cause. And the cause of God has to have a
cause. And the cause of the cause of God has to have a cause ...

Or if one asserts that God is the exception to the "First Cause"
premise, then why couldn't the universe simply be an exception to
the "First Cause" premise?

Who said, "If God didn't exist, it would be necessary for man to
invent Him."?

> My questions is, if the speed of light is slowing down, then does the
> wavelength and frequency shift, and if so in which direction?

http://www.keelynet.com/spider/b-100e.htm

Not only does this web page discuss that subject, it does it
using standing waves so it is on topic for this newsgroup.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1404. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 16:34:30 UTC
From: rlymp@hotmail.com
Message-ID: <96236c39.0408050834.2dad5dfe@posting.google.com>
Source record: 91325

Dave Shrader <david.shrader@comcast.net> wrote in message
news:<37iKc.104594$%_6.83212@attbi_s01>...
> Do you have a proper license to operate the radio?

yes kg6vvw

>
> And, Yes it does have an internal microphone. It should not need any
> testing.

I now know that it does but the gain is very low

>
> Rafael Lopez wrote:
>
> > I just got this radio last night. It's supposed to have a built in
> > mic. How can I test the mic? What button do i push?
> > I already read the online manuals for it but it doesn't even tell you
> > how to do the most simplest things.
> >
> > http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%
20and%20Marine%20Radios&Reuse=N
> >
> > thanks
> >
> >

1405. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 16:35:09 UTC
From: rlymp@hotmail.com
Message-ID: <96236c39.0408050835.3c2c5246@posting.google.com>
Source record: 91326

"CW" <no adddress@spam free.com> wrote in message
news:<N6mdnfzcvq0pnmfdRVn-vA@comcast.com>...
> I have this radio. The manual is quite complete and gives detailed operating
> instructions. Your message raises doubts about whether you actually have a
> license. If not, I suggest you forget abut using that radio. Unlicensed
> operation carries stiff penalties.

I agree
it's kg6vvw

>
> "Rafael Lopez" <rlopez@sanbrunocable.com> wrote in message
> news:10fj7cql5skbh5e@corp.supernews.com...
> > I just got this radio last night. It's supposed to have a built in
> > mic. How can I test the mic? What button do i push?
> > I already read the online manuals for it but it doesn't even tell you
> > how to do the most simplest things.
> >
> >
> http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%20
and%20Marine%20Radios&Reuse=N
> >
> > thanks
> >
> >

1406. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 16:35:45 UTC
From: rlymp@hotmail.com
Message-ID: <96236c39.0408050835.24d4a52d@posting.google.com>
Source record: 91327

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:<76YKc.165057$2o2.9242508@twister.southeast.rr.com>...
> "Rafael Lopez" <rlopez@sanbrunocable.com> wrote in message
> news:10fj7cql5skbh5e@corp.supernews.com...
> > I just got this radio last night. It's supposed to have a built in
> > mic. How can I test the mic? What button do i push?
> > I already read the online manuals for it but it doesn't even tell you
> > how to do the most simplest things.
> >
> >
> http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%20and%20Marine%20Radios&Reuse=N
> >
> > thanks
> >
> >
> Manual for this radio is very good but it is not a troubleshooting guide.
> What did you say your call was .

kg6vvw

1407. Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 17:27:40 UTC
From: NA <NA@NA.com>
Message-ID: <41126e14$0$5906$61fed72c@news.rcn.com>
Source record: 91328

Candidates must have superior communication skills

Boutique management consulting firm in downtown Chicago needs an advanced-degreed electrical engineer who is highly knowledgeable about 1) antenna design and 2) emerging technologies in the wireless industry. This contract will last anywhere from 10 to 100 hours. The hours will be very flexible. Future engagements may ensue.

The ideal candidate would be an experienced engineer who is familiar with the concepts of MIMO and adaptive phased array antennas. Experience with licensing intellectual property is extremely helpful.

Please submit a resume with a brief discussion of your antenna design experience. For consideration, candidates must have excellent communication skills, both oral and written. Please only respond if you possess such abilities as your skill at articulating complex technical information to the lay business community is crucial.

Again, please respond ONLY if you have excellent communication skills.

rate: $65/hour
please send resume to job-38422472@craigslist.org

1408. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 17:53:10 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41127406.7070200@psu.edu>
Source record: 91329

rafael wrote:
> "Jimmie" <Gfender@carolina.rr.com> wrote in message
news:<76YKc.165057$2o2.9242508@twister.southeast.rr.com>...
>
>>"Rafael Lopez" <rlopez@sanbrunocable.com> wrote in message
>>news:10fj7cql5skbh5e@corp.supernews.com...
>>
>>>I just got this radio last night. It's supposed to have a built in
>>>mic. How can I test the mic? What button do i push?
>>>I already read the online manuals for it but it doesn't even tell you
>>>how to do the most simplest things.
>>>
>>>
>>
>> http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1120&Name=Ham%2
0and%20Marine%20Radios&Reuse=N
>>
>>>thanks
>>>
>>>
>>
>>Manual for this radio is very good but it is not a troubleshooting guide.
>>What did you say your call was .

Welcome to the ARS, Rafael! Congrats on getting your license. Have you joined a club yet? This will be a big step in evaluating your equipment. Depending on the local repeaters, Some may have a feature where after punching in a particular key sequence on your HT, the repeater will record and transmit your signal back to you. That is a really valuable thing.

In the interim between your first post and now, did you ascertain that the audio is low?

One of the first things you want to do is check to see if it is the internal mic, or if it is a gain problem. Buy or borrow an external mic that will work with the unit, then try that. Problem cured? It is the mic. No? then it is probably a gain or other problem.

Hope this helps.

- Mike KB3EIA -

this is a site that oddly enough is a service for blind people, but has many manuals for radios:

http://www.icanworkthisthing.com/docs/amateur_radio/handheld/HTX202%20and%20Notes.shtml

1409. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 18:07:42 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <4112776E.DE4994E6@uci.edu>
Source record: 91330

Cecil Moore wrote:
> http://www.keelynet.com/spider/b-100e.htm
>
> Not only does this web page discuss that subject, it does it
> using standing waves so it is on topic for this newsgroup.

A perfect candidate for:

http://www.crank.net/index.html

ac6xg

1410. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 18:38:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4hv4h0tbp0iv0baj26atunp5fcqcf8nbn0@4ax.com>
Source record: 91331

On Thu, 5 Aug 2004 12:27:40 -0500, "NA" <NA@NA.com> wrote:

>rate: $65/hour
You might hire a clown for that much, and you probably will.

1411. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 18:58:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41128174$1_3@127.0.0.1>
Source record: 91332

Jim Kelley wrote:
> Cecil Moore wrote:
>>http://www.keelynet.com/spider/b-100e.htm
>>
>>Not only does this web page discuss that subject, it does it
>>using standing waves so it is on topic for this newsgroup.
>
> A perfect candidate for: http://www.crank.net/index.html

Strange, I noticed that he agrees with some of the things
you have said on this newsgroup. :-)
--
73, Cecil http://www.qsl.net/w5dxp

1412. Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 19:08:19 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2nff1oFcejcU1@uni-berlin.de>
Source record: 91333
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Half way through erecting a co-linear for 145MHz, the
Station Manager asked of me what would we be having for
tea?

Being in a creative mood, I came up with the following,
and because of the context, have named it, "Sausage Co-Linear".....

Lightly grease a baking tray.

Make up 6 oz of pastry, but before adding the water,
add and distribute 1 heaped teaspoonful of Colman's
Mustard Powder.

Roll out the pastry and lay it into the baking tray.

Take 1 lb of pork sausage meat and break it up into
lumps no bigger than a large bumblebee. Spread these
lumps out onto the pastry.

Liberally spread Mixed Herbs over the sausage meat.

Peel and slice 6 large potatoes (not baking size) and
cover the sausage meat.

Take 1/2 lb of cherry tomatoes, heat in a saucepan
and reduce.

Spread the tomatoes over the pastry.

Gather the perimeter of the pastry together. (Use the
Cornish Nasty style)

Bake at 180 C for 1 hour.

1413. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 19:27:23 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ceu1ragkn1@newshost.mot.com>
Source record: 91334

You'll be lucky to find this for $165. Doesn't want too much...

--
Steve N, K,9;d, c. i My email has no u's.

"NA" <NA@NA.com> wrote in message
news:41126e14$0$5906$61fed72c@news.rcn.com...
> ***Candidates must have superior communication skills***
>
> Boutique management consulting firm in downtown Chicago needs an
> advanced-degreed electrical engineer who is highly knowledgeable about 1)
> antenna design and 2) emerging technologies in the wireless industry. This
> contract will last anywhere from 10 to 100 hours. The hours will be very
> flexible. Future engagements may ensue.
>
> The ideal candidate would be an experienced engineer who is familiar with
> the concepts of MIMO and adaptive phased array antennas. Experience with
> licensing intellectual property is extremely helpful.
>
> Please submit a resume with a brief discussion of your antenna design
> experience. For consideration, candidates must have excellent
communication
> skills, both oral and written. Please only respond if you possess such
> abilities as your skill at articulating complex technical information to
the
> lay business community is crucial.
>
> Again, please respond ONLY if you have excellent communication skills.
>
> rate: $65/hour
> please send resume to job-38422472@craigslist.org
>
>
>
>

1414. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 20:11:50 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <8l45h051tniljtjetul668c2422qcso3bc@4ax.com>
Source record: 91336

On Thu, 5 Aug 2004 09:16:50 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>
>"Dave" <Devarim@hotmail.com> wrote in message
>news:71e36daf66252ade5994154dc5b5b606@news.meganetnews.com...
>> Question related to my other post:
>>
>> What interaction would there be to feed a 40-meter
>> dipole and 20-meter dipole with a single 50-ohm coax
>> cable? That way I'd get 40, 20, and 15 all on one cable...
>> Seems it should work - on the resonant antenna will load,
>> but I'm sure the lengths would need to be slightly different
>> than a single dipole on the coax feeder.
>>
>> Also, what if I were to short out the coax as an option,
>> and try to load the entire thing using the single wire
>> terminal on my Kenwood tuner?
>> Thanks!
>> Dave
>
>
>
> It's also done with the wires all parallel ro each other, but spaced
>apart by 8-12 inches. Pretty sure there are pix on the

I have some info that may help in understanding the multiple dipole on one
feedline situation. I'm quoting below a portion of a section from Reflections 1
and 2 that I wrote for this particular situation. Here 'tis:

Sec 20.2.2 Stagger-Tuned Dipoles

There is a second method of obtaining multi-band dipole operation that does
not have the undesirable bandwidth limitation of the trap dipole. This method
uses multiple dipoles fed in parallel from the same feed line, and is called
stagger tuning. The length of each separate dipole is 1/2wl for each band.
Hence, each dipole presents a good impedance match to the feed line on the band
for which it is intended and a poor match on all the others. It is an effective
system because none of the dipoles takes power from the feed line except the one
that is 1/2wl at the operating frequency, and thus it is the only one matched to
the feed line at that frequency. The dipoles need not be configured in different
directions to avoid mutual coupling.
As an example, consider a two-dipole arrangement with one dipole cut to
1/2wl on 80 meters and the other cut for 40 meters. With this arrangement, 1/2wl
dipole bandwidth is obtained on both 80 and 40, and in addition, the 40-meter

dipole is also a center-fed 3/2wl radiator on 15 meters, which also presents a good match to coaxial feed lines. Here is how the frequency selection occurs. On 80 meters, the 80-meter dipole behaves in the conventional manner, but the 40-meter dipole is inactive because its terminal impedance at 80 meters is approximately 14 - j1300 ohms. This impedance results in a mismatch of well over 2400:1 on 50-ohm line, assuring its inactivity. On 40 meters, the 40-meter dipole also behaves in the conventional manner, but the 80-meter dipole presents a terminal impedance of approximately 5000 ohms to the feed line at 40 meters, for a mismatch of 100:1. Consequently, this mismatch is also sufficiently severe to result in an inactive 80-meter dipole on 40 meters, especially since the 40-meter dipole is taking practically all the power from the line because of its good match. On 15 meters, the mismatch of the 80-meter dipole is in the same ballpark as it is on 40 meters, assuring inactivity on this band.
In practice, I have found that a good match results on 80, 40, and 15 meters when 80- and 40-meter dipoles are prepared for l/2 operation using the standard length formula.

End quote from Reflections

Walt Maxwell, W2DU
Author of Reflections

1415. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 20:21:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <411296D3.CD1EF823@uci.edu>
Source record: 91338

```
Cecil Moore wrote:
>
> Jim Kelley wrote:
> > Cecil Moore wrote:
> >>http://www.keelynet.com/spider/b-100e.htm
> >>
> >>Not only does this web page discuss that subject, it does it
> >>using standing waves so it is on topic for this newsgroup.
> > >
> > > A perfect candidate for: http://www.crank.net/index.html
> >
> Strange, I noticed that he agrees with some of the things
> you have said on this newsgroup. :-)

:-) I guess we must have read some of the same books.

73, ac6xg
```

1416. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 20:26:38 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41129aa1_1@news1.prserv.net>
Source record: 91337

OK, Reg, good program. To make it even more useful to lazy hams, pick a few (no more than 5) typical examples and list the results in tabular form. Start at salt water and end at dry sand. My experience (and apparently ITU's, judging from their curves) is that there are very few places which do not fit an easily defined category.

--
Crazy George
Remove N O and S P A M imbedded in return address

1417. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 20:49:40 UTC
From: Alan Mears - M0TEC <newbury66@hotmail.com>
Message-ID: <E3xQc.511$um1.338@newsfe4-gui.ntli.net>
Source record: 91335
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nff1oFcejcU1@uni-berlin.de...
> Half way through erecting a co-linear for 145MHz, the
> Station Manager asked of me what would we be having for
> tea?
>
> Being in a creative mood, I came up with the following,
> and because of the context, have named it, "Sausage Co-Linear".....
>
> Lightly grease a baking tray.
>
> Make up 6 oz of pastry, but before adding the water,
> add and distribute 1 heaped teaspoonful of Colman's
> Mustard Powder.
>
> Roll out the pastry and lay it into the baking tray.
>
> Take 1 lb of pork sausage meat and break it up into
> lumps no bigger than a large bumblebee. Spread these
> lumps out onto the pastry.
>
> Liberally spread Mixed Herbs over the sausage meat.
>
> Peel and slice 6 large potatoes (not baking size) and
> cover the sausage meat.
>
> Take 1/2 lb of cherry tomatoes, heat in a saucepan
> and reduce.
>
> Spread the tomatoes over the pastry.
>
> Gather the perimeter of the pastry together. (Use the
> Cornish Nasty style)
>
> Bake at 180 C for 1 hour.
>
>
>
And this is relevant in what way to Amateur Radio?
Have you finally completely lost it?

1418. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 20:51:37 UTC
From: fractenna@aol.com
Message-ID: <20040805165137.07394.00000876@mb-m15.aol.com>
Source record: 91339

>You'll be lucky to find this for $165.

Dream on...

73,
Chip N1IR

1419. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 21:00:35 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040805170035.04811.00002067@mb-m24.aol.com>
Source record: 91340

> And the cause of the cause of God has to have a cause ...
>
>Or if one asserts that God is the exception to the "First Cause"
>premise, then why couldn't the universe simply be an exception to
>the "First Cause" premise?
>
>Who said, "If God didn't exist, it would be necessary for man to
>invent Him."?

I look at it like this: you try to explain transistor to your dog, you won't get too far. The same thing is with us and God, we are still to stupid to understand and comprehend His wisdom and doings. One day maybe we get closer, in the mean time lets be gratefull for what we have and praise His wisdom and kindness.

Yuri da K3BUm

1420. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 21:07:34 UTC
From: Starr <thick.as@plank.net>
Message-ID: <ceu7iu$m95$0@pita.alt.net>
Source record: 91341
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Alan Mears - M0TEC wrote:
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:2nff1oFcejcU1@uni-berlin.de...
>> Half way through erecting a co-linear for 145MHz, the
>> Station Manager asked of me what would we be having for
>> tea?
>>
>> Being in a creative mood, I came up with the following,
>> and because of the context, have named it, "Sausage Co-Linear".....
>>
>> Lightly grease a baking tray.
>>
>> Make up 6 oz of pastry, but before adding the water,
>> add and distribute 1 heaped teaspoonful of Colman's
>> Mustard Powder.
>>
>> Roll out the pastry and lay it into the baking tray.
>>
>> Take 1 lb of pork sausage meat and break it up into
>> lumps no bigger than a large bumblebee. Spread these
>> lumps out onto the pastry.
>>
>> Liberally spread Mixed Herbs over the sausage meat.
>>
>> Peel and slice 6 large potatoes (not baking size) and
>> cover the sausage meat.
>>
>> Take 1/2 lb of cherry tomatoes, heat in a saucepan
>> and reduce.
>>
>> Spread the tomatoes over the pastry.
>>
>> Gather the perimeter of the pastry together. (Use the
>> Cornish Nasty style)
>>
>> Bake at 180 C for 1 hour.
>>
>>
>>
> And this is relevant in what way to Amateur Radio?
> Have you finally completely lost it?

oh I don't know. It sounds rather tasty though the mustard is a little daring. I would give French mustard a try but i don't think they do that in a powder. :D

--
S
--
I live my life like I play games, I cheat.
-
Trolls are your enemies, wipe them out.
http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
-

1421. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 21:33:51 UTC
From: Chaney <chaney@i12.com>
Message-ID: <3JxQc.58389$a8.38256@fe2.news.blueyonder.co.uk>
Source record: 91343
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

You have a xyl!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!.....

On the other hand...welcome to the real world...

--

Chaney

Chaney's World
www.chaney.i12.com
"Airy R. Bean" <me@privacy.net> wrote in message
news:2nff1oFcejcU1@uni-berlin.de...
> Half way through erecting a co-linear for 145MHz, the
> Station Manager asked of me what would we be having for
> tea?
>
> Being in a creative mood, I came up with the following,
> and because of the context, have named it, "Sausage Co-Linear".....
>
> Lightly grease a baking tray.
>
> Make up 6 oz of pastry, but before adding the water,
> add and distribute 1 heaped teaspoonful of Colman's
> Mustard Powder.
>
> Roll out the pastry and lay it into the baking tray.
>
> Take 1 lb of pork sausage meat and break it up into
> lumps no bigger than a large bumblebee. Spread these
> lumps out onto the pastry.
>
> Liberally spread Mixed Herbs over the sausage meat.
>
> Peel and slice 6 large potatoes (not baking size) and
> cover the sausage meat.
>
> Take 1/2 lb of cherry tomatoes, heat in a saucepan
> and reduce.
>
> Spread the tomatoes over the pastry.
>
> Gather the perimeter of the pastry together. (Use the
> Cornish Nasty style)
>

> Bake at 180 C for 1 hour.
>
>
>

1422. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 22:20:39 UTC
From: Nick <not.known@here.com.uk>
Message-ID: <XoyQc.754$Mt4.113@newsfe1-gui.ntli.net>
Source record: 91342
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Starr" <thick.as@plank.net> wrote in message
news:ceu7iu$m95$0@pita.alt.net...
> Alan Mears - M0TEC wrote:
> > "Airy R. Bean" <me@privacy.net> wrote in message
> > news:2nff1oFcejcU1@uni-berlin.de...
> >> Half way through erecting a co-linear for 145MHz, the
> >> Station Manager asked of me what would we be having for
> >> tea?
> >>
> >> Being in a creative mood, I came up with the following,
> >> and because of the context, have named it, "Sausage Co-Linear".....
> >>
> >> Lightly grease a baking tray.
> >>
> >> Make up 6 oz of pastry, but before adding the water,
> >> add and distribute 1 heaped teaspoonful of Colman's
> >> Mustard Powder.
> >>
> >> Roll out the pastry and lay it into the baking tray.
> >>
> >> Take 1 lb of pork sausage meat and break it up into
> >> lumps no bigger than a large bumblebee. Spread these
> >> lumps out onto the pastry.
> >>
> >> Liberally spread Mixed Herbs over the sausage meat.
> >>
> >> Peel and slice 6 large potatoes (not baking size) and
> >> cover the sausage meat.
> >>
> >> Take 1/2 lb of cherry tomatoes, heat in a saucepan
> >> and reduce.
> >>
> >> Spread the tomatoes over the pastry.
> >>
> >> Gather the perimeter of the pastry together. (Use the
> >> Cornish Nasty style)
> >>
> >> Bake at 180 C for 1 hour.
> >>
> >>
> >>
> > And this is relevant in what way to Amateur Radio?
> > Have you finally completely lost it?

>
> oh I don't know. It sounds rather tasty though the mustard is a little
> daring. I would give French mustard a try but i don't think they do that
in
> a powder. :D
>
Now that's an idea. Powder the French!

> --
> S
> --
> I live my life like I play games, I cheat.
> -
> Trolls are your enemies, wipe them out.
> http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
> -
>
>
>

1423. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 22:26:09 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <6uyQc.6800$Yf6.1008@lakeread03>
Source record: 91345

"NA" <NA@NA.com> wrote
>
> Boutique management consulting firm in downtown Chicago needs an
> advanced-degreed electrical engineer who is light in the loafers and works
for
> $65/hour

"Richard Clark" wrote
>> You might hire a clown for that much, and you probably will.

Hey Richard, those phased array data comm links for shampoo and hair
coloring inventory sound like serious stuff! Maybe they're running Link-11
or over-the-air-rekeying for dispatching the right hair stylists and
massage-therapists. <G>

Jack

1424. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 22:28:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3kc5h0d2mfhelstrvd1kamadup3iqmltg8@4ax.com>
Source record: 91346

On Thu, 5 Aug 2004 15:26:38 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>My experience (and apparently
>ITU's, judging from their curves) is that there are very few places which do
>not fit an easily defined category.

Hi George,

That is because it takes more than soil to define the characteristics.
I can show you three identical soils that are vastly different in RF
response. Located in Texas, Minnesota, and Iowa I believe.
Contrariwise I can find 3 vastly different soils that all exhibit
identical RF responses.

I can understand why Reggie is silent on this matter - too much
liability, impossible to forecast, and it doesn't fit into software

73's
Richard Clark, KB7QHC

1425. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 22:46:16 UTC
From: Starr <thick.as@plank.net>
Message-ID: <ceudbp$6d3$0@pita.alt.net>
Source record: 91347
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Oh come on. Xlys are easier enooought to get. Even I have one.
Chaney wrote:
> You have a xyl!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!.....
>
> On the other hand...welcome to the real world...
>
>
> Chaney's World
> www.chaney.i12.com
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:2nff1oFcejcU1@uni-berlin.de...
>> Half way through erecting a co-linear for 145MHz, the
>> Station Manager asked of me what would we be having for
>> tea?
>>
>> Being in a creative mood, I came up with the following,
>> and because of the context, have named it, "Sausage Co-Linear".....
>>
>> Lightly grease a baking tray.
>>
>> Make up 6 oz of pastry, but before adding the water,
>> add and distribute 1 heaped teaspoonful of Colman's
>> Mustard Powder.
>>
>> Roll out the pastry and lay it into the baking tray.
>>
>> Take 1 lb of pork sausage meat and break it up into
>> lumps no bigger than a large bumblebee. Spread these
>> lumps out onto the pastry.
>>
>> Liberally spread Mixed Herbs over the sausage meat.
>>
>> Peel and slice 6 large potatoes (not baking size) and
>> cover the sausage meat.
>>
>> Take 1/2 lb of cherry tomatoes, heat in a saucepan
>> and reduce.
>>
>> Spread the tomatoes over the pastry.
>>
>> Gather the perimeter of the pastry together. (Use the
>> Cornish Nasty style)
>>

>> Bake at 180 C for 1 hour.

--
S
--
I live my life like I play games, I cheat.
-
Trolls are your enemies, wipe them out.
http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
-

1426. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 22:59:19 UTC
From: mexico_zero <andre.craddock@spamntlworld.com>
Message-ID: <bZyQc.387$KW.91@newsfe3-gui.ntli.net>
Source record: 91344
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nff1oFcejcU1@uni-berlin.de...
> Half way through erecting a co-linear for 145MHz, the
> Station Manager asked of me what would we be having for
> tea?
> <SLICE>

Don't you think you've eaten enough??......

1427. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 23:09:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4112bf71$1_7@corp.newsgroups.com>
Source record: 91349

Jim Kelley wrote:
>
> Cecil Moore wrote:
>>Strange, I noticed that he agrees with some of the things
>>you have said on this newsgroup. :-)
>
> :-) I guess we must have read some of the same books.

Yes, for instance, the following experiment is expanded somewhat
from what he presented.

1W SGCL 1---------------feedline----------------1W SGCL 2
TV RCVR 1 TV RCVR 2

There are two sources, one at each end of a transmission line.
Each source is equipped with a circulator and load feeding a
TV receiver. The two signals are the same frequency but with
different video modulation. TV RCVR 1 receives the signal
generated by SGCL 2. TV RCVR 2 receives the signal generated by
SGCL 1.

He asserts that no energy is transferred in the above experiment.
You have made similar assertions in the past. So how does the TV
signal get from the signal generators to the TV receivers without
any energy being transferred?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1428. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 23:14:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4112c082_7@corp.newsgroups.com>
Source record: 91350

Yuri Blanarovich wrote:
> ... in the mean time lets be gratefull for what we have and praise
> His wisdom and kindness.

I praise Her wisdom and kindness every day. :-)

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1429. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 23:40:27 UTC
From: k9sqg@aol.com
Message-ID: <20040805194027.00667.00001092@mb-m03.aol.com>
Source record: 91351

I'd would use what I've found to be an effective alternative. Make it an inverted V, feed it with open wire or ladder line, and you have a nice multiband antenna.

1430. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-05 23:41:47 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4112C5DB.9AF83FCD@shaw.ca>
Source record: 91352
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Airy R. Bean" wrote:
>
> Half way through erecting a co-linear for 145MHz, the
> Station Manager asked of me what would we be having for
> tea?
>
> Being in a creative mood, I came up with the following,
> and because of the context, have named it, "Sausage Co-Linear".....
>
We tried the same recipe, but it turned out the butcher had
stuffed one end of the sausages with soy, the other with meat.
When asked why, he replied that because of tough financial
restraints he was having problem making both ends meat!

Irv VE6BP

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1431. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 00:03:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <4112CADB.34E9E9C2@uci.edu>
Source record: 91353

Cecil Moore wrote:
> > :-) I guess we must have read some of the same books.
>
> Yes, for instance, the following experiment is expanded somewhat
> from what he presented.
>
> 1W SGCL 1---------------feedline----------------1W SGCL 2
> TV RCVR 1 TV RCVR 2
>
> There are two sources, one at each end of a transmission line.
> Each source is equipped with a circulator and load feeding a
> TV receiver. The two signals are the same frequency but with
> different video modulation. TV RCVR 1 receives the signal
> generated by SGCL 2. TV RCVR 2 receives the signal generated by
> SGCL 1.

> He asserts that no energy is transferred in the above experiment.
> You have made similar assertions in the past. So how does the TV
> signal get from the signal generators to the TV receivers without
> any energy being transferred?

Well actually, what I've said before with regard to similar arrangements is energy would be transferred from each source to the opposite circulator load. And that is independent of whether the receivers are present, which in this case would also absorb some energy. Clearly we have energy being transferred in both directions. Besides, two independently modulated waveforms can hardly be considered 'phase coherent'. Wouldn't you agree?

73, ac6xg

1432. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 00:06:31 UTC
From: Barry Harris <corblimey@mail2juggler.com>
Message-ID: <bYzQc.413$KW.9@newsfe3-gui.ntli.net>
Source record: 91348
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Alan Mears - M0TEC wrote:

> "Airy R. Bean" <me@privacy.net> wrote in message
> news:2nff1oFcejcU1@uni-berlin.de...
>
>>Half way through erecting a co-linear for 145MHz, the
>>Station Manager asked of me what would we be having for
>>tea?
>>
>>Being in a creative mood, I came up with the following,
>>and because of the context, have named it, "Sausage Co-Linear".....

~~~~~

>>Bake at 180 C for 1 hour.
>>
>>
>>
>
> And this is relevant in what way to Amateur Radio?

Of course - it's home made - just the way he likes it.

Sadly I thought someone of his standing would have eaten fresh, home cured or sourced meat rather than sausages, as they can often be seen as a cheaper and mass produced 'off the shelf' foodstuff.....eaten by CBers and M3s? ;-)

> Have you finally completely lost it?

Lost what? He's never had it to lose!

Barry.
~~~~~

1433. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 00:35:49 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <FnAQc.1922$nx2.919@newsread2.news.atl.earthlink.net>
Source record: 91354

```
--
Listen to Alternative News and Conversation You Won't Hear On Commercial
Radio.
Visit http://live365.com/stations/pascoradio
YOU HAVE BEEN WARNED!

First Time Users May Be asked To Do A 1 Time Setup.
"Walter Maxwell" <w2du@iag.net> wrote in message
news:8l45h051tniljtjetul668c2422qcso3bc@4ax.com...
> On Thu, 5 Aug 2004 09:16:50 -0500, "Steve Nosko"
> <suteuve.nosukowicuz@moutouroula.com> wrote:
>
> >
> >"Dave" <Devarim@hotmail.com> wrote in message
> >news:71e36daf66252ade5994154dc5b5b606@news.meganetnews.com...
> >> Question related to my other post:
> >>
> >> What interaction would there be to feed a 40-meter
> >> dipole and 20-meter dipole with a single 50-ohm coax
> >> cable? That way I'd get 40, 20, and 15 all on one cable...
> >> Seems it should work - on the resonant antenna will load,
> >> but I'm sure the lengths would need to be slightly different
> >> than a single dipole on the coax feeder.
> >>
> >> Also, what if I were to short out the coax as an option,
> >> and try to load the entire thing using the single wire
> >> terminal on my Kenwood tuner?
> >> Thanks!
> >> Dave
> >
> >
> >
> > It's also done with the wires all parallel ro each other, but spaced
> >apart by 8-12 inches. Pretty sure there are pix on the
>
> I have some info that may help in understanding the multiple dipole on one
> feedline situation. I'm quoting below a portion of a section from
Reflections 1
> and 2 that I wrote for this particular situation. Here 'tis:
>
> Sec 20.2.2 Stagger-Tuned Dipoles
>
> There is a second method of obtaining multi-band dipole operation
that does
```

> not have the undesirable bandwidth limitation of the trap dipole. This
method
> uses multiple dipoles fed in parallel from the same feed line, and is
called
> stagger tuning. The length of each separate dipole is 1/2wl for each band.
> Hence, each dipole presents a good impedance match to the feed line on the
band
> for which it is intended and a poor match on all the others. It is an
effective
> system because none of the dipoles takes power from the feed line except
the one
> that is 1/2wl at the operating frequency, and thus it is the only one
matched to
> the feed line at that frequency. The dipoles need not be configured in
different
> directions to avoid mutual coupling.
> As an example, consider a two-dipole arrangement with one dipole cut
to
> 1/2wl on 80 meters and the other cut for 40 meters. With this arrangement,
1/2wl
> dipole bandwidth is obtained on both 80 and 40, and in addition, the
40-meter
> dipole is also a center-fed 3/2wl radiator on 15 meters, which also
presents a
> good match to coaxial feed lines. Here is how the frequency selection
occurs. On
> 80 meters, the 80-meter dipole behaves in the conventional manner, but the
> 40-meter dipole is inactive because its terminal impedance at 80 meters is
> approximately 14 - j1300 ohms. This impedance results in a mismatch of
well over
> 2400:1 on 50-ohm line, assuring its inactivity. On 40 meters, the 40-meter
> dipole also behaves in the conventional manner, but the 80-meter dipole
presents
> a terminal impedance of approximately 5000 ohms to the feed line at 40
meters,
> for a mismatch of 100:1. Consequently, this mismatch is also sufficiently
severe
> to result in an inactive 80-meter dipole on 40 meters, especially since
the
> 40-meter dipole is taking practically all the power from the line because
of its
> good match. On 15 meters, the mismatch of the 80-meter dipole is in the
same
> ballpark as it is on 40 meters, assuring inactivity on this band.
> In practice, I have found that a good match results on 80, 40, and 15
> meters when 80- and 40-meter dipoles are prepared for l/2 operation using
the
> standard length formula.
>
> End quote from Reflections

>
> Walt Maxwell, W2DU
> Author of Reflections
>

You may still want a drink after considering the options.

1434. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 00:59:27 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <PJAQc.215035$IQ4.178723@attbi_s02>
Source record: 91355

Also, as an ordained clergyman who happens to be science/engineering
trained and professed, I have refrained from responding to this thread.

Let's move on. Archeology will study the evidence for many years and
many hypotheses will surface. Science is the pursuit of knowledge.
Theology is the study of God. Eventually they will meet.

DD, W1MCE

Theplanters95 wrote:
> I have found this thread interesting, but as a Christian minister, I use ham
> radio as a stresss outlet. Many people hold to deep religious beliefs
> (including me) and some comments can cause flame wars. Please be respectful of
> other beliefs, and let's return this thread to ham radio and antenna's. For a
> discussion of creation and creation science (2 different entities, as creation
> teaches theology, and creation science focuse on the science) let's move to
> another forum. BTW not all creationists or creation scientist believe in a
> young earth, as some hold to an old earth. And not all evolutionists are
> atheist as some believe in theistic evolution. We have about 8 different
> systems based around these 2. Check out answers in genesis, and Institute for
> Creation Research for more info. And too see how the flood could have been
> global. But, that is a discussion for Sunday's sermon, which is on Creation.
>
> My questions is, if the speed of light is slowing down, then does the
> wavelength and frequency shift, and if so in which direction? It has been over
> 20 years since college physics and astronomy...Memory is not what it used to
> be. If I remember correctly, a relationship exists between speed and
> frequency. Also, does the speed of radio waves change? E=MC^2 would show that
> energy is decreasing, which runs counter to the 3 laws of thermodynamics.
> Where is the missing energy? This could cause a major shift in scientific
> thinking and laws....Science laws are not absolute. WOW, let me ponder that.
>
> Randy KA4NMA
>

1435. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 01:59:26 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4112e5ff$0$22720$39cecf19@news.twtelecom.net>
Source record: 91356

Richard Clark wrote:

>
> Hi George,
>
> That is because it takes more than soil to define the characteristics.
> I can show you three identical soils that are vastly different in RF
> response. Located in Texas, Minnesota, and Iowa I believe.
> Contrariwise I can find 3 vastly different soils that all exhibit
> identical RF responses.
>
> I can understand why Reggie is silent on this matter - too much
> liability, impossible to forecast, and it doesn't fit into software
>
> 73's
> Richard Clark, KB7QHC

Ok, I will take it on your word that this situation exists. As an engineer, I would want to know what is different about the 3 "identical" soils that aren't "identical". And the 3 unidentical "identical" soils. There must be something(s) that is(are) quantifiable, or they wouldn't have different responses. Duh.

Most things can be modeled, at worst as an extrapolated lookup table built from empirical measurements. If it can be modeled, then Reg's program can be made more accurate. Isn't that what we want here, better, more accurate tools?

tom
K0TAR

1436. Hustler parts needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 02:16:00 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <10h5qj5sl253924@corp.supernews.com>
Source record: 91358

Hello all,

I have the Hustler coils but, I'm missing the 54" mast they mount on. The coils I'm talking about are the old white coils for 10-15-20-40-80 meters that were kinda popular 10 or 15 years ago. I'd be more than happy with the solid mast but, a folding one is acceptable as well.

Does anyone have one of these laying around they want to part with??

OR, maybe someone has come up with a work around for the mast. I'm trying to mount these on the roll bar on my pickup truck so height is not a problem.. I can only get them down to a 3:1 swr though.. Any ideas??

Drop me an e-mail and we'll work out the $$'s.

Paul Jordan
kl0an
Anchorage, AK

1437. Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 02:20:56 UTC
From: Ken Luther <sparkzz@aol.com>
Message-ID: <pan.2004.08.06.02.20.56.595396@aol.com>
Source record: 91357

Hello,

I running an off-center-fed inverted V with ladder line and a tuner.
One leg about 80 feet, the other about 40. It works pretty good
on 20,40, and 80 meters -- I haven't tried any other bands.

1438. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 02:23:18 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4112eb96$0$22718$39cecf19@news.twtelecom.net>
Source record: 91359

Cecil Moore wrote:

> Who said, "If God didn't exist, it would be necessary for man to
> invent Him."?

Douglas Adams? ;)

Not so, but without the prior art...

tom
K0TAR

1439. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 02:27:22 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4112ec8a$0$22718$39cecf19@news.twtelecom.net>
Source record: 91360

Dave Shrader wrote:

> Also, as an ordained clergyman who happens to be science/engineering
> trained and professed, I have refrained from responding to this thread.
>
> Let's move on. Archeology will study the evidence for many years and
> many hypotheses will surface. Science is the pursuit of knowledge.
> Theology is the study of God. Eventually they will meet.
>
> DD, W1MCE
>

Or, no offence intended, you could select "Ignore Thread" or the
equivalent in your reader.

tom
K0TAR

1440. Re: Hustler parts needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 02:34:41 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <47CQc.251974$XM6.114143@attbi_s53>
Source record: 91361

"Paul Jordan" <pauljordan@gci.net> wrote in message
news:10h5qj5sl253924@corp.supernews.com...
> Hello all,
>
> I have the Hustler coils but, I'm missing the 54" mast they mount on.
> The coils I'm talking about are the old white coils for 10-15-20-40-80
> meters that were kinda popular 10 or 15 years ago. I'd be more than
> happy with the solid mast but, a folding one is acceptable as well.
>
> Does anyone have one of these laying around they want to part with??
>
> OR, maybe someone has come up with a work around for the mast. I'm
> trying to mount these on the roll bar on my pickup truck so height is
> not a problem.. I can only get them down to a 3:1 swr though.. Any
> ideas??
>
> Drop me an e-mail and we'll work out the $$'s.
>
> Paul Jordan
> kl0an
> Anchorage, AK
>
Paul -

Hustler is now owned by New-Tronics Antenna Corp.
http://www.new-tronics.com/main/index.html

DX Engineering has a very good web site with all of the parts that you would
need.
http://www.dxengineering.com/default.asp?DeptID=8

$ 31.75 for the Hustler MO-2 ... 54" Bumper mount mast
http://www.dxengineering.com/Products.asp?ID=46&SecID=6&DeptID=8

Replacement nuts and ferrules ! or 40/80 meter whips
http://www.dxengineering.com/Products.asp?ID=79&SecID=6&DeptID=8

w9gb

1441. Re: Two dipoles on one feed line?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 03:24:32 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <FRCQc.2796$ow.745@bignews3.bellsouth.net>
Source record: 91362

I've seen similar antenna descriptions in QST or one of the antenna
compendiums
One caught my eye which used 4-conductor flat cable - each conductor cut for
separate bands.
I think the cable was rotor control cable -
but it would be interesting to see how something like 14/3wg uf cable would
work out
I just use a G5RV and a tuner

"Dave" <Devarim@hotmail.com> wrote in message
news:71e36daf66252ade5994154dc5b5b606@news.meganetnews.com...
> Question related to my other post:
>
> What interaction would there be to feed a 40-meter
> dipole and 20-meter dipole with a single 50-ohm coax
> cable? That way I'd get 40, 20, and 15 all on one cable...
> Seems it should work - on the resonant antenna will load,
> but I'm sure the lengths would need to be slightly different
> than a single dipole on the coax feeder.
>
> Also, what if I were to short out the coax as an option,
> and try to load the entire thing using the single wire
> terminal on my Kenwood tuner?
>
> Thanks!
>
> Dave
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1442. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 04:33:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41130b5a_5@corp.newsgroups.com>
Source record: 91364

Tom Ring wrote:
> Cecil Moore wrote:
>> Who said, "If God didn't exist, it would be necessary for man to
>> invent Him."?
>
> Douglas Adams? ;) Not so, but without the prior art...

I was thinking maybe Nietzsche? Too bad I kept only my
technical college books.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1443. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 04:36:32 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <h5udnQSChftZl47cRVn-gQ@comcast.com>
Source record: 91363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:5lorg05q2ie059nblq6puqhv7op9t25hvu@4ax.com...
> On Mon, 2 Aug 2004 00:48:18 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
> wrote:
>
> >> I suspect that you measured capacitance directly with either a
> >> capacitance bridge or a DMM.
> >
> >I did.
> >
> >> Those won't work because they don't use
> >> RF frequencies.
> >
> >They work just fine. I use them all the time, on the job and else where.
>
> Hi Leland,
>
> They may work fine, but having an answer does not make it accurate.

The meter reading matches what I would have expected to see. I did measure
another mag mount and got around 150pf, BUT that one was missing the
aluminium foil sheet that should cover the bottom.

>
> However, this is one component you have not measured, and admittedly
> so. It also begs discussing other sources of failure that go
> undetected. Extrapolation from 1Khz to 27Mhz is tenuous if not
> fraught with large scale error.

The capacitance meter used is not based on using frequency. Typicaly they
will use a constant current source and measure the time to reach a fixed
voltage on the capacitor. Since using a constant current source results in a
linear rate of charge the time required to reach a fixed voltage is directly
related to the capacitance. Using this method there are NO frequency effects
to screw up the reading.

>
> > About the ESR, equivalent
> >series resistance, which is composed of mainly skin effect on the plates
and
> >losses in the dielectric, this appears in series with the capacitance and
> >simply adds to the resistive feed point impedance of the antenna.
>
> This talks to the difference between having a good match, and having a

> good radiator. The two have nothing to do with one or the other.

You should know better. Many many antenna maufactures take advantange of the significant resistance of the loading coils they use to raise the feed point impedance to something near 50 ohms. A very short, electricaly, antenna may ony exibit several ohms of impedance at the operating frequency. I've even used my RF impedance bridge to confirm it. If the loading coil in series with an antenna can raise the feed point impedance, then a very losy capacitor in series can do the same.

> If
> you can confine a "bad match" to the points between the ends of a
> radiator, the state of mismatch is immaterial (and in fact, most
> common implementations of antennas - monopoles, dipoles - do support a
> mismatch with a standing wave along their entire length notably
> described as the current/voltage distribution). All such antennas
> find it quite within their ability to ring with standing waves and be
> highly efficient.

I think everybody knows that antennas have standing waves on them, but that doesn't have a thing to do with coupling the sheild of the coax to a ground plane, which by the way is the main point which you haven't addressed.
>
> >The feed
> >point impedance of a typical 1/4 wave ground plane with the radials at 90
> >degrees to the vertical element is around 30 to 40 ohms, so a bit of
extra
> >resistance makes the match look better at the expense of a lower over all
> >antenna efficiency.
>
> The "bit" of extra resistance so sought (and presumably to the market
> advantage) comes to upwards of 20 Ohms by your estimation above. With
> this logic you could just as well glue the antenna to cardboard, add a
> resistor and make the same claims. The lower efficiency so casually
> dismissed runs to 4dB; however, that is at the extreme of your range.

And the manufactures of those real stubby mag-mount antennas do just that effectively by using real high loss base loading coils. But don't tell the unsuspecting CBers that.

>
> This gracious discarding of power only speaks of the scenario where
> the "capacitor" of the mount has short leads - but it doesn't. Most
> mag-mounts have several many feet of cable leading back to the source,
> which then matches that length through the chassis to return to the
> opposite side of the "plate" supported by the sheet metal beneath the
> mount.
>
> If simple math employing mount radius, paint thickness and the like
> sufficed to explain how mag-mounts "need" their capacitance to appear
> beneath them; then the same analysis can be applied to the cable that
> leads to the same mag-mount's plate. I would offer that a simple six

> foot length of that cable, ordinary rg-58 (shield O.D. at 0.195" with
> overall O.D. at 0.210"), offers on the order of 40 odd square inches
> of surface area. Being a cylinder, not all of that surface is in
> close contact with the chassis as it is routed along to the mag-mount.
> As such, I will assign it a plate separation distance of half the
> overall cable O.D. or 0.105". Plugging and chugging through the
> standard formulas results in several hundred pF.

Two problems. One the RF is confined to the area between the shield and the center wire in the coax. Second if it isn't then you have unbalanced currents flowing on the coax thus making the coax a part of the radiating system, not to mention the fact that the RF current at the antenna end of the coax isn't the same as at the transmitter end. And that has to be the case because what current flows through the capacitance to ground along the length of the coax can't exit at the end. Think about what your SWR meter would make of a situation like that.

Capacitive coupling to the body of the car is required where direct grounding is not possible. If you don't believe it then stick a known mag-mount antenna on a car, run the coax away from all the sheet metal, and check the match. Then disconnect the shield inside of the base and see what happens. Then for further proof directly ground one end of a capacitor, in the neighborhood of the values discussed here, then connect the shield of the coax to the free end and check your match, Remember to keep the leads real short to prevent the extra wire length from detuning the antenna too much. That should be sufficient to make my point.

--
Leland C. Scott
KC8LDO

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1444. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 05:20:38 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <m6CdnVkh4oeHiI7cRVn-sg@comcast.com>
Source record: 91365
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
news:hh8sg056hnve2jcmv7vjsud5me6bls5lr0@4ax.com...
> Ever wonder why so many different types of capacitors exist?

No.

> I mean,
> if the dielectric properties of so many materials had such little
> variation with frequency, why the need for so many different types?

Frank I design Induction Heating power supplies for a living, including RF. I'm probably more aware of capacitor characteristics that you may think. I've had custom capacitors designed by another company in our group specifically for applications in some of our equipment based on my specifications. I've tested capacitors to failure under all manner of conditions etc.

> Why are mica, air and vacuum caps sometimes preferred for RF

Little to no dielectric heating in the case of mica and the vacuum type is used where you need to handle very high voltages without using very high plate to plate spacing in an air dielectric type. Also some of those air dielectric types burn up the ball bearings from arcing due to poor contact, where used, that support the shaft. Something to watch out for when shopping for used parts.

> over ceramic?

The ceramic has higher losses. I've blown enough of them up to know. You also have to watch out how much current those little disk jobs carry. The plating on the ceramic can lead to unexpected I^2 R losses on them too.

>Why not just use electrolytics?

Unless they are specially designed they don't have good high frequency characteristics, high ESR, and they typically can't handle high levels of ripple, AC, current. Somebody had us design a power supply doing 5KW using a single phase supply, I had to use a load of electrolytics to keep the ripple current below the cap's ratings, which wasn't much.

> Of course you know the
> answer, and that's why if you are going to measure a capacitor you
> MUST measure it at the operating frequency. And, if possible, under
> load.

If I wanted to know the impedance yes. But if all I want is the capacitance without all of the stray inductance, capacitor loses etc. lumped in the

answer is no.

>
>
> > About the ESR, equivalent
> >series resistance, which is composed of mainly skin effect on the plates
and
> >losses in the dielectric, this appears in series with the capacitance and
> >simply adds to the resistive feed point impedance of the antenna. The
feed
> >point impedance of a typical 1/4 wave ground plane with the radials at 90
> >degrees to the vertical element is around 30 to 40 ohms, so a bit of
extra
> >resistance makes the match look better at the expense of a lower over all
> >antenna efficiency.
>
>
> ESR is not just skin effect and dielectric losses. But skin effect
> -is- a major factor where ferromagnetic conductors are concerned; and
> dielectric losses in many materials mount up quickly with frequency.
> Regardless, you didn't measure the impedance at operating frequency so
> you don't know the ESR.

I though I made it clear, I don't care what the ESR happens to be. I'm only
interested in the capacitance value.

>
>
> > Capacitive coupling to the body of the car is required,
>
>
> That's just flat-out wrong.

Frank I'm just going to call this thread quits. I'm satisfied with how the
mag-mount antenna works. If you don't agree then that's for you to deal
with. What I described matches what I have read, makes sense with theory,
matches experiments I've done some time back etc. I think you need to spend
more time researching the subject. Just remember that at one time some
people said the earth was flat, oh well.

--
Leland C. Scott
KC8LDO

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1445. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 05:31:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pe46h0hkact59vefsrvsa7cgf77dd2aq8o@4ax.com>
Source record: 91366

On Thu, 05 Aug 2004 20:59:26 -0500, Tom Ring <news0000@taring.org>
wrote:

>Ok, I will take it on your word that this situation exists.

Hi Tom,

Taking it on my word is untraceable and merely fostering the
perpetuation of Reggie's Old Wive's Tale.

>I would want to know what is different about the 3 "identical"
> soils that aren't "identical".

The soils found in Quantico Maryland, Urbana Illinois, and Manhattan
Kansas are all identical in composition, and yet span nearly 10:1 in
conductivity.

>And the 3 unidentical "identical" soils.

The soils found in Culbertson Montana, Manhattan Kansas, and Fargo
North Dakota all have identical conductivity, and yet are spread out
in wildly diverging soil compositions.

>There must be something(s) that is(are) quantifiable, or they
>wouldn't have different responses. Duh.

What would you suggest it is about Reggie's software that
differentiates it across these 5 samples? Ask for more if you wish,
I've got roughly 50 across the United States, and I could probably
pull in another couple dozen from around the world.

As I said, the silence from Reggie on this topic speaks for itself.
England is a very, very small data set to forecast foreign ground
characteristics. His software may be suitable for his garden, but
across this continent it would require far more variables than those
offered. Soil is not that simple and it is largely beyond the
capacity of any individual here to characterize short of simply
burying a monopole and abstracting the loss (but that doesn't give you
any numbers to plug into the program, does it?).

Tom, why don't you offer us what your soil characteristics are, and
what numbers you would plug in? This simply proves the software
caveat: GIGO.

73's
Richard Clark, KB7QHC

1446. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 05:40:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f566h09eqptcp70brvg8cp59qutjdk1505@4ax.com>
Source record: 91367

On Thu, 5 Aug 2004 18:26:09 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>Hey Richard, those phased array data comm links for shampoo and hair
>coloring inventory sound like serious stuff! Maybe they're running Link-11
>or over-the-air-rekeying for dispatching the right hair stylists and
>massage-therapists. <G>
>
>Jack

Hi Jack,

Fur sure. It's hard to imagine who's the biggest buffoon in this
contract. The head-hunter who hasn't got a clue about the nature of
the request, the customer who will take a toss of the dice with anyone
who can shuck and jive the talk, or the migrant worker who will blow
his income on a ticket to get there and get stiffed.

73's
Richard Clark, KB7QHC

1447. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 07:26:08 UTC
From: tox <abc@bcafafafa.couk>
Message-ID: <koGQc.22$4s.17@newsfe5-gui.ntli.net>
Source record: 91368
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nff1oFcejcU1@uni-berlin.de...
>
> Bake at 180 C for 1 hour.
>
<Irrelevant crap snipped>

Sounds like just like another one of your recipes for disaster!

tox

1448. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 08:34:12 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2ngv7oFpiq9U1@uni-berlin.de>
Source record: 91369
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

A variation on the one about the Cornish Nasty when they
(in fact!) put meat pie at one end and apple pie at the other.

"Irv Finkleman" <finkirv@shaw.ca> wrote in message
news:4112C5DB.9AF83FCD@shaw.ca...
> "Airy R. Bean" wrote:
> > Half way through erecting a co-linear for 145MHz, the
> > Station Manager asked of me what would we be having for
> > tea?
> > Being in a creative mood, I came up with the following,
> > and because of the context, have named it, "Sausage Co-Linear".....
> We tried the same recipe, but it turned out the butcher had
> stuffed one end of the sausages with soy, the other with meat.
> When asked why, he replied that because of tough financial
> restraints he was having problem making both ends meat!

1449. Re: Arnold Schwarzenegger Commits Suicide **TROJAN VIRUS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 13:05:18 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <hmLQc.11592$Uh.62@fed1read02>
Source record: 91370
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

"Emily" <Emily@yahoo.com> wrote in message
news:BdKdnRQeqe_hqo3cRVn-qQ@comcast.com...
> And I was dumb enough to click on the link just to see what would happen!!
> N3YOZ

I bet I know how you check for RF & high voltage!

Ed
wb6wsn

1450. Re: Hustler parts needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 14:07:33 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <d147h0p10d1nrqs6b4098i14vl51qisqo4@4ax.com>
Source record: 91271

On Fri, 06 Aug 2004 02:34:41 GMT, "G.Beat" <now9spamgb@no.comcast.spam.net>
wrote:

>"Paul Jordan" <pauljordan@gci.net> wrote in message
>news:10h5qj5sl253924@corp.supernews.com...
>> Hello all,
>>
>> I have the Hustler coils but, I'm missing the 54" mast they mount on.
>> The coils I'm talking about are the old white coils for 10-15-20-40-80
>> meters that were kinda popular 10 or 15 years ago. I'd be more than
>> happy with the solid mast but, a folding one is acceptable as well.
>>
>> Does anyone have one of these laying around they want to part with??
>>
>> OR, maybe someone has come up with a work around for the mast. I'm
>> trying to mount these on the roll bar on my pickup truck so height is
>> not a problem.. I can only get them down to a 3:1 swr though.. Any
>> ideas??
>>
>> Drop me an e-mail and we'll work out the $$'s.
>>
>> Paul Jordan

>> kl0an

You might also try www.larryflynt.com. He might have the parts you need.

Walt
>> Anchorage, AK
>>
>Paul -
>
>Hustler is now owned by New-Tronics Antenna Corp.
>http://www.new-tronics.com/main/index.html
>
>DX Engineering has a very good web site with all of the parts that you would
>need.
>http://www.dxengineering.com/default.asp?DeptID=8
>
>$ 31.75 for the Hustler MO-2 ... 54" Bumper mount mast
>http://www.dxengineering.com/Products.asp?ID=46&SecID=6&DeptID=8
>
>Replacement nuts and ferrules ! or 40/80 meter whips
>http://www.dxengineering.com/Products.asp?ID=79&SecID=6&DeptID=8
>

>
>w9gb
>

1451. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 14:10:22 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ijMQc.7956$Yf6.2407@lakeread03>
Source record: 91272

"Richard Clark" wrote

> The soils found in Quantico Maryland, Urbana Illinois, and Manhattan
> Kansas are all identical in composition, and yet span nearly 10:1 in
> conductivity.

Sorry Richard, but I'm sure you can find a better adjective than "identical" to describe soils which react differently to resistance and impedance measurements. Such is an impossibility. As Tom said, something which is clearly quantifiable is different in order to produce drastically different resistance and impedance measurements. You have a circular argument that must be restated in order to be considered.

> The soils found in Culbertson Montana, Manhattan Kansas, and Fargo
> North Dakota all have identical conductivity, and yet are spread out
> in wildly diverging soil compositions.

Now this is a more common condition that could be said about several materials. It is possible to have different materials display very "similar" (for our purposes) resistance and impedance.

Even without testing for specific conductivity, average soil can still be considered to fall within a range that is useful for earthing ground system (and then why not radials?) planning purposes. I don't see why a software program could not offer a few ranges of conductivity that would fit 99% of all soil conductivity, no matter what the soil composition. We could really care less what the composition is as long as it offers good earthing or radial conductivity, right? Adding Bentonite would bring a low conductivity to a known standard. It would have this result in any soil anywhere in the world. Just my thoughts, as I don't believe you intended to make "soil" the issue, just it's differing conductivity - which isn't really all that different at given RH.

Best regards,

Jack Painter
Virginia Beach VA

1452. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 14:49:01 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cf05tdras1@newshost.mot.com>
Source record: 91275

"Ken Luther" <sparkzz@aol.com> wrote in message
news:pan.2004.08.06.02.20.56.595396@aol.com...
> Hello,
>
> I running an off-center-fed inverted V with ladder line and a tuner.
> One leg about 80 feet, the other about 40. It works pretty good
> on 20,40, and 80 meters -- I haven't tried any other bands.
>
>

Back in the 50's, Dad used an antenna he called a "Windom" It had ladder line feed and I 'think' it was off-center fed, but can't be sure. I'm surprised off-center feed isn't used more. It gets you away from feeding two ends of multiple half waves.

If you get "iron in the sky" and you get power into it, that's all you need....Pretty much.

--
Steve N, K,9;d, c. i My email has no u's.

1453. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 14:54:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411399db$1_3@127.0.0.1>
Source record: 91273

Jim Kelley wrote:
> Well actually, what I've said before with regard to similar arrangements
> is energy would be transferred from each source to the opposite
> circulator load.

So you disagree with this quote from:

http://www.keelynet.com/spider/b-114e.htm

"If frequencies of the generators are equal, then any transfer
of energy along the wire is out of the question, ..."

> Besides, two
> independently modulated waveforms can hardly be considered 'phase
> coherent'.

More than just the modulation energy is being transferred.
The carrier frequencies of the two signal generators are
phased-locked and the average amplitudes are identical.
The standing waves have a zero magnitude every 1/2WL. The
power dissipated in the circulator load is equal to the
power output from the opposite generator, even without any
modulation. How does that energy get past the zero magnitude
points of the standing waves?
--
73, Cecil http://www.qsl.net/w5dxp

1454. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 14:56:28 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cf06bc$rc7$1@newshost.mot.com>
Source record: 91276

"Fractenna" <fractenna@aol.com> wrote in message
news:20040805165137.07394.00000876@mb-m15.aol.com...
> >You'll be lucky to find this for $165.
>
> Dream on...
>
> 73,
> Chip N1IR

Not sure of your meaning. My intent was that anyone with those
qualifications would not consult for so little.

--
Steve N, K,9;d, c. i My email has no u's.

1455. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 14:57:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cf067v$5l$1@hercules.btinternet.com>
Source record: 91274

>
> I do not believe it is anything serious. The only problem I found was
> that the link says "Radials2.exe", but the actual file is "radials2.exe"
>
> It is simply a matter of capitalization. Some servers care, some do not.
>
> 73,
> Gene

==========

The error in the HTML code in the program's filename, uploaded wth the program to my website, was corrected within 2 or 3 hours. Replacing a single upper case character "R" by a lower case "r" was all that was needed. No permanent harm done.

My real error was in NOT checking it was possible to download the program myself before advertising the fact on newsgroups that a new program was available. Very remiss of me!

Reg, G4FGQ

1456. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 15:06:18 UTC
From: Volker Kerkhoff <volker@kadira-net.com>
Message-ID: <ubqcu1-6ro.ln1@gateway.pa.homeip.net>
Source record: 91287
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Airy R. Bean wrote:
> Half way through erecting a co-linear for 145MHz, the
> Station Manager asked of me what would we be having for
> tea?
>
> Being in a creative mood, I came up with the following,
> and because of the context, have named it, "Sausage Co-Linear".....
[...]

So, what's the SWR on that?

SCNR,

73 de EB3EXX (yeay, shitty call, but mine, at last!)

1457. Anyone use the Rubber Stake Mounts with Iron horse whips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 15:31:57 UTC
From: "R. Scott" <n7hjTHREAD@yahoo.com>
Message-ID: <4113A46D.7220D696@yahoo.com>
Source record: 91277

How do they hold up with the Iron Horse type whips?
--
Scotty N7HJ
Everett, Washington
Remove THREAD to reply.

1458. New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 16:03:03 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4113ABB7.7070300@psu.edu>
Source record: 91278

Last night I put up my new home-brew Off Center Fed antenna.

It's around 50 feet up, 135 feet in total length. There is a small section, ~30 feet that hangs down from the long end, due to lack of distance between trees.

Initial SWR readings are acceptable on all bands, but I'll be doing some trimming to see if I can't nudge them down a little more.

I haven't transmitted yet, save for some low power checks on each band, and a 100 watt power check on the band with the worst SWR to see that the PA amp didn't fold back. All fine there.

My question is, is there any good trick to the end with the "hangy down part"?

Initially, I have run the wire thorough the insulator, and Ty-wrapped the outgoing wire to the incoming one, then let it drop. Or should I run the wire to the insulator in the normal way, then attach the tail with solder? I'd prefer to keep the wire in one piece if possible.

Finally, is there any advantage to putting an insulator on the end of the tail and suspending that up in another tree? In my case, it would be at about a 90 degree angle to the main part of the dipole. I'm certain in principle it is, but is there likely to be a practical effect?

- Mike KB3EIA -

1459. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 16:05:45 UTC
From: fractenna@aol.com
Message-ID: <20040806120545.24956.00000730@mb-m20.aol.com>
Source record: 91279

>Not sure of your meaning. My intent was that anyone with those
>qualifications would not consult for so little.
>

...nor be paid so much.$165 is too high.

73,
Chip N1IR

1460. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 16:35:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8n97h0h9bhhp35tprknt7vb3q0t4k50e3b@4ax.com>
Source record: 91280

On Fri, 6 Aug 2004 10:10:22 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Richard Clark" wrote
>
>> The soils found in Quantico Maryland, Urbana Illinois, and Manhattan
>> Kansas are all identical in composition, and yet span nearly 10:1 in
>> conductivity.
>
>Sorry Richard, but I'm sure you can find a better adjective than "identical"
>to describe soils which react differently to resistance and impedance
>measurements. Such is an impossibility. As Tom said, something which is
>clearly quantifiable is different in order to produce drastically different
>resistance and impedance measurements. You have a circular argument that
>must be restated in order to be considered.

Identical is what identical is. This may be circular, but it is not
inconsistent. I suggest you re-read my premise and note the
distinctions of what identities are being discussed and dismiss Tom's
short hand of the original statement.

>> The soils found in Culbertson Montana, Manhattan Kansas, and Fargo
>> North Dakota all have identical conductivity, and yet are spread out
>> in wildly diverging soil compositions.
>
>Now this is a more common condition that could be said about several
>materials. It is possible to have different materials display very "similar"
>(for our purposes) resistance and impedance.

As I offered Tom: then what composes those outstanding characteristics
that distinguish them (and that are not part of this "program") to
render an useful solution? I am merely responding within the context
of what has been discussed here. If there is any paradox, it is
certainly not my fault - look to the source.

>Even without testing for specific conductivity, average soil can still be
>considered to fall within a range that is useful for earthing ground system

Average soil? I said nothing of averages. By this term's inclusion
it further mystifies the process and reveals nothing to a particular
solution. In fact, I expect none here can define an "average" soil.
I note that Reggie can respond to an HTML error, but is consistently
quiet in regard to these characteristics. [He doesn't know either.]

>(and then why not radials?) planning purposes. I don't see why a software
>program could not offer a few ranges of conductivity that would fit 99% of
>all soil conductivity, no matter what the soil composition.

What are your particular ranges and numerical entries such that you
would have a useful employment of this program?

This discussion of averages and dismissal of soil composition merely
demonstrates the program's total uselessness - a silent patronization
of Reggie's program. I am merely blunt about it.

The fact that this all devolves to the common advice of "lay down a
dozen radials, choose as much length as you feel good about" renders
the notion of seeking THE SAME solution through software is as
remarkable as using an old fashion Magic 8-Ball (which would at least
include honest answers such as "unknown at this time, ask again").

>We could really
>care less what the composition is as long as it offers good earthing or
>radial conductivity, right?

This reveals the ignorance of soil and its characteristics (which
includes conductivity) in the first place. There are probably only
two people in this group who could name the soil in their back yard -
Me and Reggie - and Reggie ain't gonna tell you no how, no way. ;-)

>Adding Bentonite would bring a low conductivity
>to a known standard. It would have this result in any soil anywhere in the
>world.

How many tons? See, this is the staple of ignorance that orbits this
discussion. The discussion is stuck in vague generalities (I have yet
to see anyone discuss how they ACTUALLY put the program to use - dare
I ask if any of you downloaded this shelf-ware?).

This goes to the heart and soul of Reggie's denouncement of software
users as a bunch of mindless fools barely capable of reading and
hardly numerically literate enough to enter a number with more than 2
digits. He would thump the tub that the Sewer Rats of Rio could
exercise their better understanding of the first principles such that
they would fleece such idiots in a mental showdown.

We get grandiloquent and gushing fond remembrances of British
Luminaries of science and how NUMBERS are the soul of discussion, not
trivial generalizations that bleat on into fantasy physics. Reggie
loves this kind of flag waving, and yet he is not incuriously absent
in this discussion. I enjoy the irony of his condescension of his
users - especially when they run to hug this reprobate.

> Just my thoughts, as I don't believe you intended to make "soil" the
>issue, just it's differing conductivity - which isn't really all that
>different at given RH.

But there you are wrong. I am fully prepared to discuss the RF nature
of soil, and I have in the past as the archives will reveal. You may

be right in the sense that no one really cares (and let's not forget to include the Troll Master himself) as evidenced by both so little discussion of specifics, and absolutely no sense of personal usage of the details.

Really, this is a case that there is literally NOTHING you can do about it. Knowing, for many, just doesn't matter. However, pretending is enough for some, and Old Wive's Tales reduced to software makes the rest feel like academicians, engineers and savants.

However, Jack, you did make one remarkable (and to this day and era - UNIQUE) contribution that even Reggie has not recognized. I will leave it as an exercise to all to see if they can spot it in your text above.

I won't hold my breath however. :-)

73's
Richard Clark, KB7QHC

1461. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 16:43:52 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <4113B548.2588F1CB@uci.edu>
Source record: 91282

Cecil Moore wrote:
> So you disagree with this quote from:
>
> http://www.keelynet.com/spider/b-114e.htm
>
> "If frequencies of the generators are equal, then any transfer
> of energy along the wire is out of the question, ..."

If you're just looking to pick a fight with somebody, try your local
tavern.

73, ac6xg

1462. Re: Arnold Schwarzenegger Commits Suicide **TROJAN VIRUS**

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 16:50:58 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <lmd7h0dge50qec07oraaip3457gbu6bfrm@4ax.com>
Source record: 91281
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

On Fri, 6 Aug 2004 06:05:18 -0700, "Ed Price" <edprice@cox.net> wrote:

>"Emily" <Emily@yahoo.com> wrote in message
>news:BdKdnRQeqe_hqo3cRVn-qQ@comcast.com...
>> And I was dumb enough to click on the link just to see what would happen!!
>> N3YOZ
>
>I bet I know how you check for RF & high voltage!
>
>Ed
>wb6wsn

Mine clearing, too.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1463. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 16:59:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4113b703$1_3@127.0.0.1>
Source record: 91283

Steve Nosko wrote:
> I'm
> surprised off-center feed isn't used more. It gets you away from feeding
> two ends of multiple half waves.

It also guarantees unbalance at the feedpoint since the
impedance looking one direction is different from the
other direction.
--
73, Cecil http://www.qsl.net/w5dxp

1464. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 17:02:50 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <XQOQc.4244$Nd7.3151@fe39.usenetserver.com>
Source record: 91284

$65 an hour comes out to $135,200 a year if it was full time.

I would gladly work for half that!

Maybe electrical engineering jobs are growing on trees where you guys are,
but not here (central Ohio)!

--
Jim
N8EE

to email directly, send to my call sign at arrl dot net
"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:ceu1ragkn1@newshost.mot.com...
> You'll be lucky to find this for $165. Doesn't want too much...
>
> --
> Steve N, K,9;d, c. i My email has no u's.
>
> "NA" <NA@NA.com> wrote in message
> news:41126e14$0$5906$61fed72c@news.rcn.com...
> > ***Candidates must have superior communication skills***
> >
> > Boutique management consulting firm in downtown Chicago needs an
> > advanced-degreed electrical engineer who is highly knowledgeable about
1)
> > antenna design and 2) emerging technologies in the wireless industry.
This
> > contract will last anywhere from 10 to 100 hours. The hours will be very
> > flexible. Future engagements may ensue.
> >
> > The ideal candidate would be an experienced engineer who is familiar
with
> > the concepts of MIMO and adaptive phased array antennas. Experience with
> > licensing intellectual property is extremely helpful.
> >
> > Please submit a resume with a brief discussion of your antenna design
> > experience. For consideration, candidates must have excellent
> communication
> > skills, both oral and written. Please only respond if you possess such
> > abilities as your skill at articulating complex technical information to
> the
> > lay business community is crucial.
> >

> > Again, please respond ONLY if you have excellent communication skills.
> >
> > rate: $65/hour
> > please send resume to job-38422472@craigslist.org
> >
> >
> >
> >
>
>

1465. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 17:17:40 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <f9f7h0hd1ed540ombcre1d2qprj3q13obp@4ax.com>
Source record: 91285
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Fri, 6 Aug 2004 01:20:38 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote in <m6CdnVkh4oeHiI7cRVn-sg@comcast.com>:

>
>"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
>news:hh8sg056hnve2jcmv7vjsud5me6bls5lr0@4ax.com...
>> Ever wonder why so many different types of capacitors exist?
>
>No.
>
> > I mean,
>> if the dielectric properties of so many materials had such little
>> variation with frequency, why the need for so many different types?
>
>Frank I design Induction Heating power supplies for a living, including RF.
>I'm probably more aware of capacitor characteristics that you may think.
>I've had custom capacitors designed by another company in our group
>specifically for applications in some of our equipment based on my
>specifications. I've tested capacitors to failure under all manner of
>conditions etc.

I doubt it. If you had such experience then you would know that
frequency plays an essential role in the application of any capacitor.

>> Why are mica, air and vacuum caps sometimes preferred for RF
>
>Little to no dielectric heating in the case of mica and the vacuum type is
>used where you need to handle very high voltages without using very high
>plate to plate spacing in an air dielectric type.

See below.

> Also some of those air
>dielectric types burn up the ball bearings from arcing due to poor contact,
>where used, that support the shaft. Something to watch out for when shopping
>for used parts.

I've never seen anything of the sort since almost all air variables
are built with a type of grounding brush to the shaft, usually located
at both ends, and at the shields used to seperate the sections if it's
a multi-section cap. Ball bearings have never been relied upon as the
sole electrical connection to the shaft since they are usually coated
with some sort of non-conductive lubricant. If you had any of the
experience you claim you would have known that, too.

>> over ceramic?
>
>The ceramic has higher losses. I've blown enough of them up to know. You
>also have to watch out how much current those little disk jobs carry. The
>plating on the ceramic can lead to unexpected I^2 R losses on them too.

You missed the question. Regardless, the answer is because air, vacuum
and mica capacitors have a much higher Q at higher frequencies than
ceramic caps. IOW, with increasing frequency, the effective resistance
of the capacitor is higher for ceramic than for air, vacuum or mica
caps, the reactance being equal. Every dielectric will have a Q/f
curve. But that's only -one- of the reasons frequency is important for
testing. Others include dielectric conductivity (g increases with
increasing frequency), dielectric absorption, hysteresis, inductive
reactance, etc. Very few materials show the dielectric characteristics
that would make them suitable for RF capacitors, and I don't think
automobile paint is on that list.

>>Why not just use electrolytics?
>
>Unless they are specially designed they don't have good high frequency
>characteristics, high ESR, and they typically can't handle high levels of
>ripple, AC, current. Somebody had us design a power supply doing 5KW using a
>single phase supply, I had to use a load of electrolytics to keep the ripple
>current below the cap's ratings, which wasn't much.

Ever hear of a circuit called a 'capacitance multiplier'? Regardless,
I made my point above, and with the next reply.

>> Of course you know the
>> answer, and that's why if you are going to measure a capacitor you
>> MUST measure it at the operating frequency. And, if possible, under
>> load.
>
>If I wanted to know the impedance yes. But if all I want is the capacitance
>without all of the stray inductance, capacitor loses etc. lumped in the
>answer is no.

The pure capacitance, or the "zero-frequency" value, is academic and
has no practical significance. Again, this is something you would know
if you had the experience you claim.

>> > About the ESR, equivalent
>> >series resistance, which is composed of mainly skin effect on the plates
>and
>> >losses in the dielectric, this appears in series with the capacitance and
>> >simply adds to the resistive feed point impedance of the antenna. The
>feed
>> >point impedance of a typical 1/4 wave ground plane with the radials at 90
>> >degrees to the vertical element is around 30 to 40 ohms, so a bit of
>extra
>> >resistance makes the match look better at the expense of a lower over all
>> >antenna efficiency.

>>
>>
>> ESR is not just skin effect and dielectric losses. But skin effect
>> -is- a major factor where ferromagnetic conductors are concerned; and
>> dielectric losses in many materials mount up quickly with frequency.
>> Regardless, you didn't measure the impedance at operating frequency so
>> you don't know the ESR.
>
>I though I made it clear, I don't care what the ESR happens to be. I'm only
>interested in the capacitance value.

If you don't care about the ESR then you don't care about the
practicality of the mag-mount base as an RF ground since ESR is an
unavoidable confound in that or any other capacitance.

>> > Capacitive coupling to the body of the car is required,
>>
>>
>> That's just flat-out wrong.
>
>Frank I'm just going to call this thread quits. I'm satisfied with how the
>mag-mount antenna works. If you don't agree then that's for you to deal
>with. What I described matches what I have read, makes sense with theory,
>matches experiments I've done some time back etc. I think you need to spend
>more time researching the subject. Just remember that at one time some
>people said the earth was flat, oh well.

I suggested you perform the experiment as I did. It eliminates all
relevant confounds and gives an unextrapolated picture of how a
mag-mount base works. On the suggestion of another poster I have done
a second experiment which supports my conclusions, and also validites
the results of my first experiment. You have refused to do the
experiment, you have no justification to dispute it, and you are
demonstrating that your education and experience in the matter is not
even close to what you claim. So if you want to drop the thread then
that's probably a wise decision for you to make.

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1466. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 17:18:01 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <p9f7h0t2jeehkqssp5q2s8e5563qlo1bea@4ax.com>
Source record: 91286
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Fri, 6 Aug 2004 00:36:32 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote in <h5udnQSChftZl47cRVn-gQ@comcast.com>:

<snip>
>Capacitive coupling to the body of the car is required where direct
>grounding is not possible. If you don't believe it then stick a known
>mag-mount antenna on a car, run the coax away from all the sheet metal, and
>check the match. Then disconnect the shield inside of the base and see what
>happens. Then for further proof directly ground one end of a capacitor, in
>the neighborhood of the values discussed here, then connect the shield of
>the coax to the free end and check your match, Remember to keep the leads
>real short to prevent the extra wire length from detuning the antenna too
>much. That should be sufficient to make my point.

Even better, do the experiment I suggested previously.

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1467. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 17:43:00 UTC
From: fractenna@aol.com
Message-ID: <20040806134300.26011.00001114@mb-m28.aol.com>
Source record: 91288

>$65 an hour comes out to $135,200 a year if it was full time.
>
>I would gladly work for half that!
>

When you subtract overhead and benefits, that's is about 1/2. $65 is about right; maybe as high as $85-95 in some areas of the country--but probably not Chicago, whear the COL is lower than some other places.. That's my opinion, anyway.

73,
Chip N1IR

1468. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 18:57:31 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cf0kfbfm1@newshost.mot.com>
Source record: 91289

In the right place, half that (65K) is close to what very good clerks are paid. Careful not to compare salary with cost (sal. + benefits + whatever). A consultant has to work for more than cost since he isn't working all year...then there's what the market/client will bear. This can very LOTS! There is clearly the haves an have nots.

Yea, OK on the $165 comment. Doing the math with 2080 hours per year, this is about correct. $135k, including all benefits/costs, is close to what it costs to support one very experienced Engineer in the corp world.
In the mid west, experienced Engineers (I have connections with) are in the $85-100K/yr range, but this is ONLY salary. Real hot shots are in the $115K+ range. What little 'special' work I have done can't really be called consulting, but I got about that on an hourly basis. They really have to want your skills and have the $$.

Sure, there are lots of people who would gladly work for $60k. Then again, there are lots of people who would b glad *2* work. Lot of us are watching our backs.

--
Steve N, K,9;d, c. i My email has no u's.

"Fractenna" <fractenna@aol.com> wrote in message
news:20040806134300.26011.00001114@mb-m28.aol.com...
> >$65 an hour comes out to $135,200 a year if it was full time.
> >
> >I would gladly work for half that!
> >
>
> When you subtract overhead and benefits, that's is about 1/2. $65 is about
> right; maybe as high as $85-95 in some areas of the country--but probably
not
> Chicago, whear the COL is lower than some other places.. That's my
opinion,
> anyway.
>
> 73,
> Chip N1IR

1469. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 19:45:22 UTC
From: fractenna@aol.com
Message-ID: <20040806154522.16456.00000927@mb-m14.aol.com>
Source record: 91290

>A consultant has to work for more than cost since he isn't working all
>year..

Why not?

If there are gigs out there, many do work all year long--save for reasonable vacation. I know several.

The going rate is just not in the $100/hr range in the midwest. That's pushing it in the east, too.

73,
Chip N1IR

1470. EMI Supression Required for Satellite Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 20:32:16 UTC
From: anc <anc@nospam.co.uk>
Message-ID: <4113ebe7$0$7116$db0fefd9@news.zen.co.uk>
Source record: 91291

I have just bought a second hand Echostar AD-3000IP satellite receiver.
It is connected by a 2 pin power lead (no earth) to UK domestic 240V supply,
but emits strong modulated tones at AM frequencies centered on 1400KHz, even
when the unit is in standby mode.

Unfortunately this RFI is also rich in harmonics and can be heard at
2800KHz, 5600KHz etc all the way up to 21MHz. What is the best way of
suppressing this RFI?

As far as I can tell the RFI is airborne though I may try a ferrite bead on
the power lead.
The unit sits on a shelf in a small TV cabinet, and I may even try making a
faraday cage from aluminium cooking foil and connecting this to earth also.

Look forward to hear further ideas/solutions. TIA

1471. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 21:03:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4113f351_5@corp.newsgroups.com>
Source record: 91292

Jim Kelley wrote:

> Cecil Moore wrote:
>>So you disagree with this quote from:
>>http://www.keelynet.com/spider/b-114e.htm
>>"If frequencies of the generators are equal, then any transfer
>>of energy along the wire is out of the question, ..."
>
> If you're just looking to pick a fight with somebody, try your local
> tavern.

Translation: It makes me angry that you earlier caught me in
an error which I now refuse to admit ever happened.

It is a simple yes/no question. A simple yes/no answer would
be sufficient - or even a rational explanation of why
you asserted essentially the same thing a few weeks ago.
--
73, Cecil http://www.qsl.net/w5dxp

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1472. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 21:10:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4113f4f9$1_5@corp.newsgroups.com>
Source record: 91293

JLB wrote:

> $65 an hour comes out to $135,200 a year if it was full time.
> I would gladly work for half that!
> Maybe electrical engineering jobs are growing on trees where you guys are,
> but not here (central Ohio)!

Maybe you should set your sights higher.

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1473. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 21:16:13 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <4113F51D.39020CB1@uci.edu>
Source record: 91294

Cecil Moore wrote:
>
> Jim Kelley wrote:
>
> > Cecil Moore wrote:
> >>So you disagree with this quote from:
> >>http://www.keelynet.com/spider/b-114e.htm
> >>"If frequencies of the generators are equal, then any transfer
> >>of energy along the wire is out of the question, ..."
> >
> > If you're just looking to pick a fight with somebody, try your local
> > tavern.

> Translation: It makes me angry that you earlier caught me in
> an error which I now refuse to admit ever happened.

Nope. That's not it. I've said the same thing all along. What makes
me angry is when out of the blue you come on here and start
mischaracterizing what I've said. You bring up some nutcase website,
and then try to saddle me with it.

> It is a simple yes/no question. A simple yes/no answer would
> be sufficient - or even a rational explanation of why
> you asserted essentially the same thing a few weeks ago.

That's an outright lie, Cecil. Mensa my eye. Like I said - take it
down to the bar.

73, ac6xg

P.S. You still haven't answered my question.

1474. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 21:43:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4113fca3_8@corp.newsgroups.com>
Source record: 91296

Jim Kelley wrote:
> I've said the same thing all along.

BS!!

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1475. Re: EMI Supression Required for Satellite Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 21:47:07 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <i%SQc.9406$Ns.7556@bignews5.bellsouth.net>
Source record: 91295

you might try 3 things
1. try reversing the plug first if possible - might work if other prong is
=to ground
(unplug, turn it around and replug)
2. if RFI is still there - replace the power cord with 3-prong - and ground
the case.
or
3. unplug it, remove the cover, and pummel with a hammer

"anc" <anc@nospam.co.uk> wrote in message
news:4113ebe7$0$7116$db0fefd9@news.zen.co.uk...
> I have just bought a second hand Echostar AD-3000IP satellite receiver.
> It is connected by a 2 pin power lead (no earth) to UK domestic 240V
supply,
> but emits strong modulated tones at AM frequencies centered on 1400KHz,
even
> when the unit is in standby mode.
>
> Unfortunately this RFI is also rich in harmonics and can be heard at
> 2800KHz, 5600KHz etc all the way up to 21MHz. What is the best way of
> suppressing this RFI?
>
> As far as I can tell the RFI is airborne though I may try a ferrite bead
on
> the power lead.
> The unit sits on a shelf in a small TV cabinet, and I may even try making
a
> faraday cage from aluminium cooking foil and connecting this to earth
also.
>
> Look forward to hear further ideas/solutions. TIA
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1476. Re: New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 21:51:45 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <E3TQc.9407$Ns.4203@bignews5.bellsouth.net>
Source record: 91297

I've heard of folks running the antenna wire through a pully then tying off
the hangy-end with an insulator to keep it from swinging and getting tangled

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:4113ABB7.7070300@psu.edu...
> Last night I put up my new home-brew Off Center Fed antenna.
>
> It's around 50 feet up, 135 feet in total length. There is a small
> section, ~30 feet that hangs down from the long end, due to lack of
> distance between trees.
>
> Initial SWR readings are acceptable on all bands, but I'll be doing
> some trimming to see if I can't nudge them down a little more.
>
> I haven't transmitted yet, save for some low power checks on each band,
> and a 100 watt power check on the band with the worst SWR to see that
> the PA amp didn't fold back. All fine there.
>
> My question is, is there any good trick to the end with the "hangy down
> part"?
>
> Initially, I have run the wire thorough the insulator, and Ty-wrapped
> the outgoing wire to the incoming one, then let it drop. Or should I run
> the wire to the insulator in the normal way, then attach the tail with
> solder? I'd prefer to keep the wire in one piece if possible.
>
> Finally, is there any advantage to putting an insulator on the end of
> the tail and suspending that up in another tree? In my case, it would be
> at about a 90 degree angle to the main part of the dipole. I'm certain
> in principle it is, but is there likely to be a practical effect?
>
> - Mike KB3EIA -
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1477. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 22:48:16 UTC
From: Yodar <yodar@cfl.rr.com>
Message-ID: <QUTQc.3926$4s6.596@tornado.tampabay.rr.com>
Source record: 91298
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

SENSATIONAL ! I collect breakfast recipes engineered around "picking it
it up to eat it" Would you call this a pasty? or an Empanada?

Yodar
please reply off list as this is OT to: remove the spam yodarspam@cfl.rr.com

Airy R. Bean wrote:
> Half way through erecting a co-linear for 145MHz, the
> Station Manager asked of me what would we be having for
> tea?
>
> Being in a creative mood, I came up with the following,
> and because of the context, have named it, "Sausage Co-Linear".....
>
> Lightly grease a baking tray.
>
> Make up 6 oz of pastry, but before adding the water,
> add and distribute 1 heaped teaspoonful of Colman's
> Mustard Powder.
>
> Roll out the pastry and lay it into the baking tray.
>
> Take 1 lb of pork sausage meat and break it up into
> lumps no bigger than a large bumblebee. Spread these
> lumps out onto the pastry.
>
> Liberally spread Mixed Herbs over the sausage meat.
>
> Peel and slice 6 large potatoes (not baking size) and
> cover the sausage meat.
>
> Take 1/2 lb of cherry tomatoes, heat in a saucepan
> and reduce.
>
> Spread the tomatoes over the pastry.
>
> Gather the perimeter of the pastry together. (Use the
> Cornish Nasty style)
>
> Bake at 180 C for 1 hour.
>
>
>

1478. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 23:10:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41141111$1_6@corp.newsgroups.com>
Source record: 91299

Jim Kelley wrote:
> What makes
> me angry is when out of the blue you come on here and start
> mischaracterizing what I've said.

Anyone with a decent memory or capable of accessing Google
knows exactly what you said. Denying what you said is just
downright unethical. (Maybe you should join the John Kerry
campaign where such behavior is "normal".)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1479. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 23:21:45 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41141289$0$22716$39cecf19@news.twtelecom.net>
Source record: 91300

Richard Clark wrote:

> On Thu, 05 Aug 2004 20:59:26 -0500, Tom Ring <news0000@taring.org>
> wrote:

>
> The soils found in Culbertson Montana, Manhattan Kansas, and Fargo
> North Dakota all have identical conductivity, and yet are spread out
> in wildly diverging soil compositions.

I quote -

"I can show you three identical soils that are vastly different in RF
response."

So now they aren't identical. Which is what you originally said they
were. Which is it? Identical or not?

> His software may be suitable for his garden, but
> across this continent it would require far more variables than those
> offered. Soil is not that simple and it is largely beyond the
> capacity of any individual here to characterize short of simply
> burying a monopole and abstracting the loss (but that doesn't give you
> any numbers to plug into the program, does it?).

And I said -

"Most things can be modeled, at worst as an extrapolated lookup table
built from empirical measurements. If it can be modeled, then Reg's
program can be made more accurate. Isn't that what we want here,
better, more accurate tools?"

Which says, in simpler terms so you can't miss this time, maybe he could
make a better version with some intelligent feedback instead of you just
ripping him.

And you will probably again try to obfuscate, but don't expect any more
responses; as Roy said a while ago, I'm not playing the "last man
pissing wins" game either.

tom
K0TAR

1480. Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 23:50:33 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nijpqF1c9ppU1@uni-berlin.de>
Source record: 91301

I moved from Wichita, KS to Aurora, CO (Denver area) a year ago.

In KS I was in a 1 story apartment but had a very ham friendly
landlord. I had a GAP Titan, a Comet GP-15, a 2m/440 vertical
and 4 el on 6, 13 el on 2 and 22 el on 440. Things were nice.

Then I moved to Denver. I picked the top floor of a 3 story aptartment
building, facing away from the mountains (NE corner apt.). I wrapped
a 153's dipole made from 22 g clear insulated wire around the building
for HF, put a 6m inverted V in the east window and plonked my MFJ
"Super High Gain" 2m/440 mag mount on the in the wall A/C unit, which
was just below the north window. Not a stellar setup but I could hit
any repeater within 25 miles and I was equal to a 20w mobile on HF.

After a year of no noise, no TVI, no damages, no cops, no parties and
paying the rent on the 1st every month I finally asked the landlord if
I could erect antennas on the roof. I explained that I always put up
antennas in such a way as they could later be removed with *very* little
if any evidence that they had been there.

He said OK but no higher than 10 feet above the roof and no holes.

I put up a 10 foot mast on a vent pipe mount, holding up a Van Gorden
134' "All Bander" antenna but left the other antennas stay put.

Duuuuuuuhhhh....

This morning it hits me - I've got a closet full of coax not being used!

1st, I moved (as an experiment) the 2m/440 mag mount from indoors
on the A/C unit to on the roof. I only had to add 4' of coax and on the
edge of the roof is steel flashing - perfect for the mag mount! Now I'm
hitting repeaters 65 miles away with 5w that I couldn't hit with 50 before
and I was recieving at S3-S4 levels. Full scale of course, now.

Then, I got more ideas - I took out my old RS mag mount CB ant (the
best loaded version they ever made - cost $57 - now cut for 10m) and
put it on the roof the same way. It's 18' of stock coax reached just fine.

Then came the 6 meter antenna - I grabbed a 50' prefab RS RG58 coax
piece and went to the roof with tape, knife, zip ties, rope, etc....

30 minutes later I had secured it as an inverted V to the 10' mast. I had
to re-tune it - it was cut for 50.2 but in the clear it resonated at 53.1!
I had to add like 6" of wire to each leg. Man - I thought all the Denver
area 6m repeaters were offline....NOT! 53.050 is up! Can't wait till
a band opening to see how this 6m ant works now.

So, I pulled my head out of $%^$^% and used the equipment on hand.
I now have antennas for 80-6, 11-10, 6, 2 & 70cm all up in the clear
and that also means no antennas (RF) in the shack. Nice.

I'd put a better coax on the 2m/440 ant but it's only 18.2' long so even
changing from RG58 to LMR400 probably wouldn't make sense. Heck
- it figures out to only 1.3db difference @ 460 mhz. Nah - not worth it I
was planning on spending $200 to put up a Diamond X50 on a 5' mast
fed with 50' of LMR400 but I don't think so now - I just don't think
it would make a difference as I'm hitting all the repeaters within 60 miles
on 5w now. So, that's out.

I do worry about the 68+' of RG58 I'm running to the 6m inverted V.
Loosing 2.2 db on that run @ 52 mhz. Changing to LMR400DB would
cut that to 0.6db, gaining 1.6db. Hmmmmm. Maybe. What I need is
a omnidirectional horizontaly polarized economical gain 6m antenna.

Anybody got ideas? After today's improvements, I want more!

Ken KG0WX

1481. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-06 23:52:31 UTC
From: "Leland C. Scott" <kc8ldo@arrl.net>
Message-ID: <NK2dnQ0JvP4phIncRVn-ow@comcast.com>
Source record: 91302
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
news:f9f7h0hd1ed540ombcre1d2qprj3q13obp@4ax.com...
> On Fri, 6 Aug 2004 01:20:38 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
> wrote in <m6CdnVkh4oeHiI7cRVn-sg@comcast.com>:
>
> >
> >"Frank Gilliland" <sparky@NOSPAMaimcomm.net> wrote in message
> >news:hh8sg056hnve2jcmv7vjsud5me6bls5lr0@4ax.com...
> >> Ever wonder why so many different types of capacitors exist?
> >
> >No.
> >
> > > I mean,
> >> if the dielectric properties of so many materials had such little
> >> variation with frequency, why the need for so many different types?
> >
> >Frank I design Induction Heating power supplies for a living, including
RF.
> >I'm probably more aware of capacitor characteristics that you may think.
> >I've had custom capacitors designed by another company in our group
> >specifically for applications in some of our equipment based on my
> >specifications. I've tested capacitors to failure under all manner of
> >conditions etc.
>
>
> I doubt it. If you had such experience then you would know that
> frequency plays an essential role in the application of any capacitor.
>
>
> >> Why are mica, air and vacuum caps sometimes preferred for RF
> >
> >Little to no dielectric heating in the case of mica and the vacuum type
is
> >used where you need to handle very high voltages without using very high
> >plate to plate spacing in an air dielectric type.
>
>
> See below.
>
>
> > Also some of those air
> >dielectric types burn up the ball bearings from arcing due to poor
contact,

> >where used, that support the shaft. Something to watch out for when
shopping
> >for used parts.
>
>
> I've never seen anything of the sort since almost all air variables
> are built with a type of grounding brush to the shaft, usually located
> at both ends,

If its still there. Second the cheap recover type air variables use them,
and some people try to save a few bucks by pulling some of the plates out to
increase the air gap for higher voltage applications not understanding what
they are doing.

> and at the shields used to seperate the sections if it's
> a multi-section cap. Ball bearings have never been relied upon as the
> sole electrical connection to the shaft since they are usually coated
> with some sort of non-conductive lubricant. If you had any of the
> experience you claim you would have known that, too.

See my comment above.

>
>
> >> over ceramic?
> >
> >The ceramic has higher losses. I've blown enough of them up to know. You
> >also have to watch out how much current those little disk jobs carry. The
> >plating on the ceramic can lead to unexpected I^2 R losses on them too.
>
>
> You missed the question. Regardless, the answer is because air, vacuum
> and mica capacitors have a much higher Q at higher frequencies than
> ceramic caps. IOW, with increasing frequency, the effective resistance
> of the capacitor is higher for ceramic than for air, vacuum or mica
> caps, the reactance being equal.

Dah, that's what I said Frank in different words about losses. The vacuum
variable is used for very high voltage ablications just like the vacuum RF
relays, no air no arcing. Nobody is going to the expense of using a vacuum
variable where an air job would work. At high voltages the required spacing
between the plates becomes so high that even a small valued cap is rather
large, so they use the vacuum variable to save space, but only if the
cost-space considerations make sense. You typicaly see them used in some
tuners because of the very high voltges that are developed to achive the
match.

> Every dielectric will have a Q/f
> curve.

I've seen the curves Frank. They don't have anything to do with the pure
capacitance of the device. And that's the point. You keep trying to very

unnecessarily complicate things by dragging in issues that have nothing to do with measuring capacitance exclusive of other issues. If you can't figure out that what you're measuring with a Z-bridge is a combination of capacitance, stray inductance with non-ideal effects from skin resistance thrown in, and the differenced between them circuit wise, it's apparent I'm not going to educate you any time soon. So like I said I'm not going to waste my time further on this thread.

--
Leland C. Scott
KC8LDO

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1482. Re: Magnetic mount antenna question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 00:40:25 UTC
From: Frank Gilliland <sparky@NOSPAMaimcomm.net>
Message-ID: <n488h057lahmghnli7q52jf5uhmob0ag3k@4ax.com>
Source record: 91303
Cross-posted to: rec.radio.amateur.antenna,rec.radio.cb

On Fri, 6 Aug 2004 19:52:31 -0400, "Leland C. Scott" <kc8ldo@arrl.net>
wrote in <NK2dnQ0JvP4phIncRVn-ow@comcast.com>:

<snip>
>> Every dielectric will have a Q/f
>> curve.
>
>I've seen the curves Frank. They don't have anything to do with the pure
>capacitance of the device. And that's the point.

No, that's not the point. The point is whether a mag-mount makes an
effective ground coupling via capacitance from the base to the vehicle
body. The fact is that it doesn't. And no matter how many indirect
measurements you make or variables you present in defense of your
opinion, you can't substitute them for a direct measurement at the
operating frequency.

> You keep trying to very
>unnecessarily complicate things by dragging in issues that have nothing to
>do with measuring capacitance exclusive of other issues. If you can't
>figure out that what you're measuring with a Z-bridge is a combination of
>capacitance, stray inductance with non-ideal effects from skin resistance
>thrown in, and the differenced between them circuit wise, it's apparent I'm
>not going to educate you any time soon. So like I said I'm not going to
>waste my time further on this thread.

I measured the impedance because the antenna and coax don't see "pure
capacitance". And I don't see how using the practical and real-world
value of impedance can "unnecessarily complicate things" because those
other issues are not only necessary, but unavoidable in practical use.
And a mag-mount is most definitely a practical use. Or maybe you would
like to explain why the inductive reactance and effective resistance
are 'unnecessary complications' with this or any other capacitor?

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1483. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 00:42:05 UTC
From: k9sqg@aol.com
Message-ID: <20040806204205.29796.00002544@mb-m18.aol.com>
Source record: 91304

From my research I've found indications that radial length beyond a quarter wavelength is indeed significant out to about two wavelengths.

1484. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 00:53:46 UTC
From: Howard <mensch90249>
Message-ID: <7298h09tn71mgrhlklom7h5pscvvclu1d9@4ax.com>
Source record: 91305

On Fri, 6 Aug 2004 17:50:33 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>I moved from Wichita, KS to Aurora, CO (Denver area) a year ago.
>
>snip<
>I do worry about the 68+' of RG58 I'm running to the 6m inverted V.
>Loosing 2.2 db on that run @ 52 mhz. Changing to LMR400DB would
>cut that to 0.6db, gaining 1.6db. Hmmmmm. Maybe. What I need is
>a omnidirectional horizontaly polarized economical gain 6m antenna.
>
>Anybody got ideas? After today's improvements, I want more!
>
>Ken KG0WX
>
Ken,
You might look at the PAR Omniangle OA-50 which sells at AES for $70.
It is not a 'gain' antenna per se, but offers a very good omni pattern
and is more economical than the other 6 meter loops on the market. If
you want gain you could stack a couple of them. To get gain, you have
to compromise on the 'economical' criteria as loops tend to show
'about' the same gain as a dipole, however the cost of two loops is
less than one beam and a rotor.

While I do not own any PAR products (weren't available when I got my
AEA Halo or I would've gotten the omniangle!) they are well reviewed
in terms of performing as stated and quality of construction. Also, I
have communicated with Dale Parfitt, the man behind PAR, through both
the newsgroup and a few e-mails and have found him to be both
knowledgeable and a decent guy.

Good luck & hope to hear you on 6!
73,
Howard KE6MAK

1485. Re: EMI Supression Required for Satellite Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 01:36:57 UTC
From: Yahoo Executive Staff <invalid@yahoo.com.yahoo.com>
Message-ID: <2niq1mF1e6gsU1@uni-berlin.de>
Source record: 91306

Run it through a steel pipe, that will also choke off conducted RFI

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:i%SQc.9406$Ns.7556@bignews5.bellsouth.net...
> you might try 3 things
> 1. try reversing the plug first if possible - might work if other prong is
> =to ground
> (unplug, turn it around and replug)
> 2. if RFI is still there - replace the power cord with 3-prong - and
ground
> the case.
> or
> 3. unplug it, remove the cover, and pummel with a hammer
>
>
> "anc" <anc@nospam.co.uk> wrote in message
> news:4113ebe7$0$7116$db0fefd9@news.zen.co.uk...
> > I have just bought a second hand Echostar AD-3000IP satellite receiver.
> > It is connected by a 2 pin power lead (no earth) to UK domestic 240V
> supply,
> > but emits strong modulated tones at AM frequencies centered on 1400KHz,
> even
> > when the unit is in standby mode.
> >
> > Unfortunately this RFI is also rich in harmonics and can be heard at
> > 2800KHz, 5600KHz etc all the way up to 21MHz. What is the best way of
> > suppressing this RFI?
> >
> > As far as I can tell the RFI is airborne though I may try a ferrite bead
> on
> > the power lead.
> > The unit sits on a shelf in a small TV cabinet, and I may even try
making
> a
> > faraday cage from aluminium cooking foil and connecting this to earth
> also.
> >
> > Look forward to hear further ideas/solutions. TIA
> >
> >
>
>
> ---
> Outgoing mail is certified Virus Free.

> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>
>

1486. Re: New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 01:47:13 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408061747.3968ecb5@posting.google.com>
Source record: 91307

Mike Coslo <mjc5remove@psu.edu> wrote in message news:<4113ABB7.7070300@psu.edu>...
> Last night I put up my new home-brew Off Center Fed antenna.
>
> It's around 50 feet up, 135 feet in total length. There is a small
> section, ~30 feet that hangs down from the long end, due to lack of
> distance between trees.
>
> Initial SWR readings are acceptable on all bands, but I'll be doing
> some trimming to see if I can't nudge them down a little more.
>
> I haven't transmitted yet, save for some low power checks on each band,
> and a 100 watt power check on the band with the worst SWR to see that
> the PA amp didn't fold back. All fine there.

Then stop right there before you screw it up.

> My question is, is there any good trick to the end with the "hangy down
> part"?

No.

> Initially, I have run the wire thorough the insulator, and Ty-wrapped
> the outgoing wire to the incoming one, then let it drop. Or should I run
> the wire to the insulator in the normal way, then attach the tail with
> solder? I'd prefer to keep the wire in one piece if possible.

None of it makes any difference electrically. If the element conducts
any which way you build the "tail" and solder it yer done. The rest of
it involves common sense mechanical integrity/reliability sorts of
considerations.

> Finally, is there any advantage to putting an insulator on the end of
> the tail and suspending that up in another tree? In my case, it would be
> at about a 90 degree angle to the main part of the dipole. I'm certain
> in principle it is, but is there likely to be a practical effect?

You won't know until you try it and neither will anybody else. WRT to
"practical effects" use an end insulator as a handy interface between
the hot end of the tail and some rope and hoist the end of the tail up
to somewhere away from the lawn mower and the kids.

>
> - Mike KB3EIA

w3rv

1487. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 02:09:43 UTC
From: fractenna@aol.com
Message-ID: <20040806220943.05775.00003005@mb-m05.aol.com>
Source record: 91308

>From my research I've found indications that radial length beyond a quarter
>wavelength is indeed significant out to about two wavelengths.
>

Yes.

Personal discovery is good. Enjoy.

73,
Chip N1IR

1488. Re: EMI Supression Required for Satellite Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 02:50:50 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <4114461e_2@news1.prserv.net>
Source record: 91310

You need to put lots of ferrite on both the AC cable AND the coax to the dish. Just because it is coax doesn't mean it can't act as an antenna at HF. In fact, disconnect the coax and see if the RFI doesn't drop significantly.

--
Crazy George
Remove N O and S P A M imbedded in return address
"anc" <anc@nospam.co.uk> wrote in message
news:4113ebe7$0$7116$db0fefd9@news.zen.co.uk...
> I have just bought a second hand Echostar AD-3000IP satellite receiver.
> It is connected by a 2 pin power lead (no earth) to UK domestic 240V
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> but emits strong modulated tones at AM frequencies centered on 1400KHz,
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> when the unit is in standby mode.
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> Unfortunately this RFI is also rich in harmonics and can be heard at
> 2800KHz, 5600KHz etc all the way up to 21MHz. What is the best way of
> suppressing this RFI?
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> As far as I can tell the RFI is airborne though I may try a ferrite bead
on
> the power lead.
> The unit sits on a shelf in a small TV cabinet, and I may even try making
a
> faraday cage from aluminium cooking foil and connecting this to earth
also.
>
> Look forward to hear further ideas/solutions. TIA
>
>

1489. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 02:52:14 UTC
From: tdonaly@aol.com
Message-ID: <20040806225214.22107.00001090@mb-m07.aol.com>
Source record: 91309

Yodar wrote,
>
>SENSATIONAL ! I collect breakfast recipes engineered around "picking it
>it up to eat it" Would you call this a pasty? or an Empanada?
>
>Yodar
>please reply off list as this is OT to: remove the spam yodarspam@cfl.rr.com
>
>
>
>
>Airy R. Bean wrote:
>> Half way through erecting a co-linear for 145MHz, the
>> Station Manager asked of me what would we be having for
>> tea?
>>
>> Being in a creative mood, I came up with the following,
>> and because of the context, have named it, "Sausage Co-Linear".....
>>
>> Lightly grease a baking tray.
>>
>> Make up 6 oz of pastry, but before adding the water,
>> add and distribute 1 heaped teaspoonful of Colman's
>> Mustard Powder.
>>
>> Roll out the pastry and lay it into the baking tray.
>>
>> Take 1 lb of pork sausage meat and break it up into
>> lumps no bigger than a large bumblebee. Spread these
>> lumps out onto the pastry.
>>
>> Liberally spread Mixed Herbs over the sausage meat.
>>
>> Peel and slice 6 large potatoes (not baking size) and
>> cover the sausage meat.
>>
>> Take 1/2 lb of cherry tomatoes, heat in a saucepan
>> and reduce.
>>
>> Spread the tomatoes over the pastry.
>>
>> Gather the perimeter of the pastry together. (Use the
>> Cornish Nasty style)
>>

>> Bake at 180 C for 1 hour.
>>
>>
>>
>

Don't get too excited about it; he left out the hoi sin sauce.
73,
Tom Donaly, KA6RUH

1490. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 03:16:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6eh8h0hl7l392ilc8vu5llk7nhr8la1i8k@4ax.com>
Source record: 91311

On 07 Aug 2004 00:42:05 GMT, k9sqg@aol.com (K9SQG) wrote:

>From my research I've found indications that radial length beyond a quarter
>wavelength is indeed significant out to about two wavelengths.

Hi OM,

Are you located near South Charleston? The soil in your region is a
Silty Loam. In comparison to Manhattan Kansas, which is 4 times more
conductive (probably a good indicator of your longer radials
effectivity), the soil characteristics (that pesky permittivity, no
one has a clue to guess) are identical. You could be worse off in
conductivity in Pendleton Oregon, but you would not be able to tell
the difference in the soil.

Three identical soils (ALL silty loams), three totally different
characteristics. Anyone try Reggie's program to figure out why? Or
is this a situation where you have to know the answer to find the
solution? ;-)

73's
Richard Clark, KB7QHC

1491. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 03:56:56 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nj267F1d3nmU1@uni-berlin.de>
Source record: 91312

"Howard" <mensch90249> wrote in message
news:7298h09tn71mgrhlklom7h5pscvvclu1d9@4ax.com...
> On Fri, 6 Aug 2004 17:50:33 -0600, "Ken Bessler"
> <kg0wx@NOSPAMyahoo.com> wrote:
>
> Ken,
> You might look at the PAR Omniangle OA-50 which sells at AES for $70.
> It is not a 'gain' antenna per se, but offers a very good omni pattern
> and is more economical than the other 6 meter loops on the market. If
> you want gain you could stack a couple of them. To get gain, you have
> to compromise on the 'economical' criteria as loops tend to show
> 'about' the same gain as a dipole, however the cost of two loops is
> less than one beam and a rotor.
>
> While I do not own any PAR products (weren't available when I got my
> AEA Halo or I would've gotten the omniangle!) they are well reviewed
> in terms of performing as stated and quality of construction. Also, I
> have communicated with Dale Parfitt, the man behind PAR, through both
> the newsgroup and a few e-mails and have found him to be both
> knowledgeable and a decent guy.
>
> Good luck & hope to hear you on 6!
> 73,
> Howard KE6MAK

Thanks, for the tip, Howard!

After reading the general PAR and the OA-50 reviews on Eham, I'm
convinced it's the way to go! Universal Radio has them cheap ($68) - I
think I'll go for the gusto (It's only money) and order the stacking kit, 2
OA-50's and some LMR400 coax to feed them. At 35' above ground
level with 2 of them stacked with 100w from my FT-857D, should be
killer!

73's de Ken KG0WX

See ya on 50.125!

1492. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 04:56:26 UTC
From: Howard <mensch90249>
Message-ID: <9qn8h0ptn9r4un2f60lv9uv1esouq6bfs5@4ax.com>
Source record: 91313

On Fri, 6 Aug 2004 21:56:56 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>snip<
>
>
>Thanks, for the tip, Howard!
>
>After reading the general PAR and the OA-50 reviews on Eham, I'm
>convinced it's the way to go! Universal Radio has them cheap ($68) - I
>think I'll go for the gusto (It's only money) and order the stacking kit, 2
>OA-50's and some LMR400 coax to feed them. At 35' above ground
>level with 2 of them stacked with 100w from my FT-857D, should be
>killer!
>
>73's de Ken KG0WX
>
>See ya on 50.125!
>
Glad I could help. I've logged several Colorado hams so I'm sure
we'll bump into each other once you're up and running ..... and the
propogation cooperates.

73,
Howard

1493. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 09:04:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cf25vcqhb1@titan.btinternet.com>
Source record: 91314

"K9SQG" wrote
> From my research I've found indications that radial length beyond a
quarter
> wavelength is indeed significant out to about two wavelengths.

==========

Only indications?

At what frequency?

At a distance of two wavelengths you are in the far field. Any improvement in distant signal strength has little to do with antenna/transmitter radiating efficiency which depends only on what takes place in the near field. More to do with less-lossy ground reflections part way along the propagation path.

Very long radials behave similarly to large ground mats laid half way along a two-hop path.

Reg, G4FGQ

1494. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 09:13:54 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2njlieF1efb1U1@uni-berlin.de>
Source record: 91315
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

SWR - Succulent With Ratatouille.

"Volker Kerkhoff" <volker@kadira-net.com> wrote in message
news:ubqcu1-6ro.ln1@gateway.pa.homeip.net...
> Airy R. Bean wrote:
> > Half way through erecting a co-linear for 145MHz, the
> > Station Manager asked of me what would we be having for
> > tea?
> > Being in a creative mood, I came up with the following,
> > and because of the context, have named it, "Sausage Co-Linear".....
> So, what's the SWR on that?

1495. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 09:24:02 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2njlifF1efb1U4@uni-berlin.de>
Source record: 91316

I didn't put any in.

"Tdonaly" <tdonaly@aol.com> wrote in message
news:20040806225214.22107.00001090@mb-m07.aol.com...
> Yodar wrote,
> >
> >SENSATIONAL ! I collect breakfast recipes engineered around "picking it
> >it up to eat it" Would you call this a pasty? or an Empanada?
> >
> >Yodar
> >please reply off list as this is OT to: remove the spam
yodarspam@cfl.rr.com
> >
> >
> >
> >
> >Airy R. Bean wrote:
> >> Half way through erecting a co-linear for 145MHz, the
> >> Station Manager asked of me what would we be having for
> >> tea?
> >>
> >> Being in a creative mood, I came up with the following,
> >> and because of the context, have named it, "Sausage Co-Linear".....
> >>
> >> Lightly grease a baking tray.
> >>
> >> Make up 6 oz of pastry, but before adding the water,
> >> add and distribute 1 heaped teaspoonful of Colman's
> >> Mustard Powder.
> >>
> >> Roll out the pastry and lay it into the baking tray.
> >>
> >> Take 1 lb of pork sausage meat and break it up into
> >> lumps no bigger than a large bumblebee. Spread these
> >> lumps out onto the pastry.
> >>
> >> Liberally spread Mixed Herbs over the sausage meat.
> >>
> >> Peel and slice 6 large potatoes (not baking size) and
> >> cover the sausage meat.
> >>
> >> Take 1/2 lb of cherry tomatoes, heat in a saucepan
> >> and reduce.
> >>

> >> Spread the tomatoes over the pastry.
> >>
> >> Gather the perimeter of the pastry together. (Use the
> >> Cornish Nasty style)
> >>
> >> Bake at 180 C for 1 hour.
> >>
> >>
> >>
> >
>
> Don't get too excited about it; he left out the hoi sin sauce.
> 73,
> Tom Donaly, KA6RUH

1496. Airy R Bean- A warning

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 09:50:33 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2njmvbF1j47nU1@uni-berlin.de>
Source record: 91317

Airy is nothing but a troublesome troll.

Polluted uk.radio.amateur for years under various false names.

Avoid and ignore. Especially if you don't want your children threatened by
him.

1497. add on 80 meters for cushcraft r7 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 11:02:55 UTC
From: DAVID BROWNE <david.browne7@ntlworld.com>
Message-ID: <zF2Rc.147$Vx.61@newsfe2-gui.ntli.net>
Source record: 91318

hi is there any way i can add on 80 meters on the r7

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.734 / Virus Database: 488 - Release Date: 04/08/2004

1498. Being confused with two designs of Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 11:26:29 UTC
From: tahamtan@sonra.net
Message-ID: <afdf3dea.0408070326.7539173d@posting.google.com>
Source record: 91319

Hi,

I have read about collinear antennas within the two web sites below:

http://www.guerrilla.net/reference/antennas/2ghz_collinear_omni/

http://wireless.gumph.org/articles/homemadeomni.html

I have made the first one. But before testing it, I have noticed that there is a very essential difference between them. In the first design there is a short circuit between the central conductor and the shielding in all segments as the final 1/4 wavelength segments is a short circuit itself. But in the second design, there is a strict advice that check the complete antenna before using it in order to prevent any short cross connection between the central connector and shielding.

Can anyone describe me what design wil actually work? and if both will work what is the reason of that difference?

Very sincerely,
Farzad

1499. Re: add on 80 meters for cushcraft r7 ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 12:05:43 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <rA3Rc.217788$a24.139328@attbi_s03>
Source record: 91320

"DAVID BROWNE" <david.browne7@ntlworld.com> wrote in message
news:zF2Rc.147$Vx.61@newsfe2-gui.ntli.net...
>
> Hi
>
> Is there any way that I can add on 80 meters on the Cushcraft R7 antenna?
>
>

David -

I am not aware of an 80 meter add-on kit for the Cushcraft R7 antenna.
http://www.cushcraft.com/support/pdf/r7.pdf

The Cushcraft R7000 antenna did have an 80 meter add-on option, making the
antenna a R7000 Plus.
http://www.cushcraft.com/support/pdf/r7000-man.pdf

Vertical antennas have very narrow bandwidths (typically less than 70 kHz
for SWR 2:1) for usage on 75/80 meters --
frequency agility is just not typical.

Whether the 80 meter add-on kit for the R7000 or another vertical antenna
could be adopted, is a matter of experimentation.

Greg
w9gb

1500. Multiband HF Antenna Nipping | Bottom Up or Top Down?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 14:45:16 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408070645.deec383@posting.google.com>
Source record: 91221

I'm mulling the construction of a "nested HF squalos" antenna. At least three bands, wires for 20, 15 and 10M in a coplanar arrangement on four fiberglass spreaders. Basically a multiband cubical quad driven element with a common feedpoint, single feedline and flopped over into the horizontal position. After wading thru all the modeling comes the real world. I'll cut the wires a bit longer than modeling indicates and start manually tuning the thing to resonance by nipping all the wires a bit at a time using the 259B, etc. Each nip will affect the resonant points of all the wires due to the interactions amongst the wires. The question: Which wire should I start tuning first? I've seen posts which state that one should start nipping from the lowest band to the highest band and I've seen recommendations to start with the highest band and work down to the lowest band.

Which way is it??

Tnx, w3rv

1501. Re: Being confused with two designs of Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 15:36:51 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <nG6Rc.4129$Zb.2666@newssvr29.news.prodigy.com>
Source record: 91222

Tho, both will work, the correct one, from my experience with useing DB Products "Green Hornet" series antennas, is the one with the 1/4 wave/shorted piece of coax to the 1/4 wave stinger. Ans as a aside, in vhf service, check for a dead short to the antenna (they flex in the wind, -if you see it go open, or high resistance, when the wind blows, needs replaceing) one thing NOT mentioned, in either of these sites, is the application of Ground Plane radials , however, again, the shorted antenna has a 1/4 wave decoupling sleeve, which should do the same as the radials! All in All, I'd go with the shorted one- and a caution: the pattern of these is VERY NARROW- and close to the HORIZON (omni-directional) - look like drop a doughnut over the antenna! want to mount this as straight up-down (verticle) as possible for max range! As info, Jim NN7K

farzad wrote:
> Hi,
>
> I have read about collinear antennas within the two web sites below:
>
> http://www.guerrilla.net/reference/antennas/2ghz_collinear_omni/
>
> http://wireless.gumph.org/articles/homemadeomni.html
>
> I have made the first one. But before testing it, I have noticed that
> there is a very essential difference between them. In the first design
> there is a short circuit between the central conductor and the
> shielding in all segments as the final 1/4 wavelength segments is a
> short circuit itself. But in the second design, there is a strict
> advice that check the complete antenna before using it in order to
> prevent any short cross connection between the central connector and
> shielding.
>
> Can anyone describe me what design wil actually work? and if both will
> work what is the reason of that difference?
>
> Very sincerely,
> Farzad

1502. Re: Being confused with two designs of Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 16:38:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vg0ah01dgd4cepoub8ng1h5e5rno50rlnl@4ax.com>
Source record: 91224

On 7 Aug 2004 04:26:29 -0700, tahamtan@sonra.net (farzad) wrote:

>Can anyone describe me what design wil actually work? and if both will
>work what is the reason of that difference?
>
>Very sincerely,
>Farzad

Hi Farzad,

Work? Perhaps. With the advertised gain? No, not even close.

Both pages have problems beyond your issue of a short/no-short.

The immediate problem is that all sections are NOT half-wave. Both pages handle velocity factor, but one fails to include the velocity factor of the insulating jacket (it makes a difference). However, this is not the only problem.

The formulas used by both pages (with some slight difference in the speed of light) are for an EXTREMELY THIN WIRE antennas. These designs being offered are in fact VERY FAT WIRE antennas. These pages use the commonplace divisor of 2 which is wrong. Given the length to diameter ratios of the materials being used; then the divisor would be closer to 2.5 to 2.7 which is VERY different.

73's
Richard Clark, KB7QHC

1503. tuneing cushcraft r7 on 4ft poll

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 16:51:44 UTC
From: DAVID BROWNE <david.browne7@ntlworld.com>
Message-ID: <AM7Rc.571$JW6.435@newsfe5-gui.ntli.net>
Source record: 91223

hi i am trying to tune the r7 on 4ft poll, i know they tell you to use 8ft
poll
will this make this much difference,
10 meters is ok
12 meters is ok
15 meters, swr 1.6 at 21.7mhz
17 meters swr 2.1 at 18.111, swr of 1.8 at 18.168
20 meters , 2mhz out 12.455mhz swr of 1.2
30 meters swr 10:1 at 10.150mhz 9.011mhz swr of 5.2
40 meters swr of 2.1 at 6.395
don't know if traps measurements are ok as i got this second hand
measurements between traps are
A 123"
B 10.5/8"
C 6"
D 16"
E 16"
F 25"
I AM IN THE UK SO I WANTED 40 METERS AT 7.05-7.1MHZ
is the 30meter trap not working

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.734 / Virus Database: 488 - Release Date: 04/08/2004

1504. 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 17:37:25 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2nkifcF1rpiaU1@uni-berlin.de>
Source record: 91225
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Does anyone have experience of the antenna of the title, which came with all 3 suppliers info included? I purchased it at Longleat about 5 years ago, but never got round to using it. Now trying to install it at my friend's QTH to get him going

I've just spent a very frustrating afternoon trying to put this thing up, and when it was up, it exhibited a resistance of 200 Ohm between coax inner and outer.

Assumption - error in soldering PL259 - no - still does it. (During which resoldering exercise the bit fell out of the brand-new Draper 100w iron and burnt a hole in the carpet, forcing a hasty exit because of toxic fumes, followed by a hasty re-entry to pick it up because the fumes were increasing and not abating!.)

Then there were incompatibilities between different PL259's, for example, some have a shoulder deep inside which prevents the braid from reaching the soldering holes.

Then a PL259 where the thread of the locking tube was longer than the thread of the SO239 inside the antenna so it didn't lock the outer and the whole plug swivelled loosely.

Separate cable from antenna and both show open circuit, as you'd expect. Couple them together and 200 Ohm loop resistance. Ignoring any RF theory, coupling together two open circuits, one on a PL259 and the other on a SO239 just cannot result in a resistance of 200 Ohms! It's plain ornery DC electricity!

I'm banging my head against the wall! Any suggestions?

1505. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 17:45:00 UTC
From: Loz H <m3lsd@NOdsl.pipSPAMex.com>
Message-ID: <wy8Rc.1054$_I1.10014921@news-text.cableinet.net>
Source record: 91226
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Airy R. Bean <me@privacy.net> spewed forth the following...

> I'm banging my head against the wall! Any suggestions?

Yes. Put some nails in the wall before banging head.

HTH

;o)

Loz H

1506. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 18:06:28 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2nkk15F1s4qlU1@uni-berlin.de>
Source record: 91227
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nkifcF1rpiaU1@uni-berlin.de...
> Does anyone have experience of the antenna of the title, which came
> with all 3 suppliers info included? I purchased it at Longleat about
> 5 years ago, but never got round to using it. Now trying to install
> it at my friend's QTH to get him going
>
> I've just spent a very frustrating afternoon trying to put
> this thing up, and when it was up, it exhibited a resistance of
> 200 Ohm between coax inner and outer.
>
> Assumption - error in soldering PL259 - no - still does it.
> (During which resoldering exercise the bit fell out of the
> brand-new Draper 100w iron and burnt a hole in the carpet,
> forcing a hasty exit because of toxic fumes, followed by a hasty
> re-entry to pick it up because the fumes were increasing and not
> abating!.)
>
> Then there were incompatibilities between different PL259's,
> for example, some have a shoulder deep inside which prevents
> the braid from reaching the soldering holes.
>
> Then a PL259 where the thread of the locking tube was longer
> than the thread of the SO239 inside the antenna so it didn't lock
> the outer and the whole plug swivelled loosely.
>
> Separate cable from antenna and both show open circuit, as you'd
> expect. Couple them together and 200 Ohm loop resistance. Ignoring
> any RF theory, coupling together two open circuits, one on a PL259
> and the other on a SO239 just cannot result in a resistance of 200
> Ohms! It's plain ornery DC electricity!
>
> I'm banging my head against the wall! Any suggestions?

What a tale of total ineptitude.

So much for our resident 'real ham'.

They teach youngsters to fit a PL259 properly on Intermediate courses.

What happened to your years of study and experience?

I suggest you contact a qualified instructor and ask for some instruction.

1507. Re: tuneing cushcraft r7 on 4ft poll

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 19:05:45 UTC
From: Green Hornet <GH@comic.net>
Message-ID: <dK9Rc.3691$xk.3322@fed1read01>
Source record: 91228

David the R7 instruction manual is on line at URL:
http://www.cushcraft.com/support/pdf/r7.pdf

I had poor results with 40M until I got the mounting mast up to 8 feet and a slight improvement at 10 feet.

A common fault is having the assembly dimensions incorrect -- check every element and components vs the Cushcraft instructions.

Good luck

--
73 from El Hornet Verde
==========
"DAVID BROWNE" <david.browne7@ntlworld.com> wrote in message
news:AM7Rc.571$JW6.435@newsfe5-gui.ntli.net...
> hi i am trying to tune the r7 on 4ft poll, i know they tell you to use 8ft
> poll
> will this make this much difference,
> 10 meters is ok
> 12 meters is ok
> 15 meters, swr 1.6 at 21.7mhz
> 17 meters swr 2.1 at 18.111, swr of 1.8 at 18.168
> 20 meters , 2mhz out 12.455mhz swr of 1.2
> 30 meters swr 10:1 at 10.150mhz 9.011mhz swr of 5.2
> 40 meters swr of 2.1 at 6.395
> don't know if traps measurements are ok as i got this second hand
> measurements between traps are
> A 123"
> B 10.5/8"
> C 6"
> D 16"
> E 16"
> F 25"
> I AM IN THE UK SO I WANTED 40 METERS AT 7.05-7.1MHZ
> is the 30meter trap not working
>
>
> ---
> Outgoing mail is certified Virus Free.
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> Version: 6.0.734 / Virus Database: 488 - Release Date: 04/08/2004
>
>

1508. Re: Being confused with two designs of Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 19:13:43 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <HR9Rc.3743$114.1925@nwrddc02.gnilink.net>
Source record: 91229

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vg0ah01dgd4cepoub8ng1h5e5rno50rlnl@4ax.com...
> On 7 Aug 2004 04:26:29 -0700, tahamtan@sonra.net (farzad) wrote:
>
> >Can anyone describe me what design wil actually work? and if both will
> >work what is the reason of that difference?
> >
> >Very sincerely,
> >Farzad
>
> Hi Farzad,
>
> Work? Perhaps. With the advertised gain? No, not even close.
>
> Both pages have problems beyond your issue of a short/no-short.
>
> The immediate problem is that all sections are NOT half-wave. Both
> pages handle velocity factor, but one fails to include the velocity
> factor of the insulating jacket (it makes a difference). However,
> this is not the only problem.
>
> The formulas used by both pages (with some slight difference in the
> speed of light) are for an EXTREMELY THIN WIRE antennas. These
> designs being offered are in fact VERY FAT WIRE antennas. These pages
> use the commonplace divisor of 2 which is wrong. Given the length to
> diameter ratios of the materials being used; then the divisor would be
> closer to 2.5 to 2.7 which is VERY different.
>
> 73's
> Richard Clark, KB7QHC

Richard

I'm not so negative about this colinear antenna as you are. This is a
wireless (WiFi) antenna. I think either would work. I like the basic idea
expressed in the posted articles.
The plans that include the 1/4 wave brass sleeve at the end seems to make
the most sense to me. If Farzad wants an omniazimuth antenna for WiFi, this
seems like an excellant idea. It sure wouldnt cost much to try it. The
'specs' for this antenna must be very broad. The antenna just needs to
work. I would think that it could have 8 db "gain" over isotropic. It
might be unimportant that there is 'beam squint' if it is used inside a
building to extend wireless range.

If Farzad was close to the Los Angeles area, I'd ask him if I could help him build one for zero $$, since I have all the parts needed. I think it would be fun.

Jerry

1509. WTB Antenna Base

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 20:03:27 UTC
From: Pete Smith <psmith@xmission.com>
Message-ID: <cf3ch7$b4s$1@news.xmission.com>
Source record: 91231

Hello
Looking for an antenna base AB-1241 /PRC-104 ..If you have one for sale
please send me a msg with price .. Thank you Pete k7ztm

1510. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 20:22:47 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <2f-dneW0v-eKp4jcRVn-ug@adelphia.com>
Source record: 91232

Richard Clark wrote:

> On 07 Aug 2004 00:42:05 GMT, k9sqg@aol.com (K9SQG) wrote:
>
>>From my research I've found indications that radial length beyond a quarter
>
>>wavelength is indeed significant out to about two wavelengths.
>
>
> Hi OM,
>
> Are you located near South Charleston? The soil in your region is a
> Silty Loam. In comparison to Manhattan Kansas, which is 4 times more
> conductive (probably a good indicator of your longer radials
> effectivity), the soil characteristics (that pesky permittivity, no
> one has a clue to guess) are identical. You could be worse off in
> conductivity in Pendleton Oregon, but you would not be able to tell
> the difference in the soil.
>
> Three identical soils (ALL silty loams), three totally different
> characteristics. Anyone try Reggie's program to figure out why? Or
> is this a situation where you have to know the answer to find the
> solution? ;-)

Richard, where do you get the information? It would be wonderful to have a map of soil types that goes into some detail. I've downloade the map from the FCC, but that doesn't have any real detail in it.

My interest especially is that my own county has tremendously varying soils and geology (Centre County in Pennsylvania) It would be very interesting to lay a geological map ofer a soil conductivity map and compare.

- Mike KB3EIA -

1511. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 20:51:28 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2nktr8F1tq81U1@uni-berlin.de>
Source record: 91233
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

After a bit of destructive investigation, the problem was caused
by a screwed brass stud - not dissimilar to the 3/8 stud at the
base of CB antennae, but slightly smaller in diameter.

When the base part of the radiating element had been screwed in
place onto this stud, instead of the base screwing onto the
stud, the stud had, in part, unscrewed itself down into the
plastic insulator, by several turns. Unfortunately (for me and my
friend) also in the base was a 4-turn loading coil which had not
taken kindly to being unscrewed by at least 4 turns, and had
deformed so that it was intermittently shorting to the ground
plane through the tarnish of the loading coil.

Now, where to get some nylon rod of 40mm diameter to
turn up a replacement for the insulated base, which was destroyed
in the investigative process?

"Airy R. Bean" <me@privacy.net> wrote in message news:...
> Does anyone have experience of the antenna of the title, which came
> with all 3 suppliers info included? I purchased it at Longleat about
> 5 years ago, but never got round to using it. Now trying to install
> it at my friend's QTH to get him going
>
> I've just spent a very frustrating afternoon trying to put
> this thing up, and when it was up, it exhibited a resistance of
> 200 Ohm between coax inner and outer.
>
> Assumption - error in soldering PL259 - no - still does it.
> (During which resoldering exercise the bit fell out of the
> brand-new Draper 100w iron and burnt a hole in the carpet,
> forcing a hasty exit because of toxic fumes, followed by a hasty
> re-entry to pick it up because the fumes were increasing and not
> abating!.)
>
> Then there were incompatibilities between different PL259's,
> for example, some have a shoulder deep inside which prevents
> the braid from reaching the soldering holes.
>
> Then a PL259 where the thread of the locking tube was longer
> than the thread of the SO239 inside the antenna so it didn't lock
> the outer and the whole plug swivelled loosely.
>
> Separate cable from antenna and both show open circuit, as you'd
> expect. Couple them together and 200 Ohm loop resistance. Ignoring

> any RF theory, coupling together two open circuits, one on a PL259
> and the other on a SO239 just cannot result in a resistance of 200
> Ohms! It's plain ornery DC electricity!
>
> I'm banging my head against the wall! Any suggestions?
>
>
>
>

1512. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 20:52:51 UTC
From: Alan Mears - M0TEC <newbury66@hotmail.com>
Message-ID: <DibRc.663$JW6.546@newsfe5-gui.ntli.net>
Source record: 91230
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nkifcF1rpiaU1@uni-berlin.de...
> Does anyone have experience of the antenna of the title, which came
> with all 3 suppliers info included? I purchased it at Longleat about
> 5 years ago, but never got round to using it. Now trying to install
> it at my friend's QTH to get him going
>
> I've just spent a very frustrating afternoon trying to put
> this thing up, and when it was up, it exhibited a resistance of
> 200 Ohm between coax inner and outer.
>
> Assumption - error in soldering PL259 - no - still does it.
> (During which resoldering exercise the bit fell out of the
> brand-new Draper 100w iron and burnt a hole in the carpet,
> forcing a hasty exit because of toxic fumes, followed by a hasty
> re-entry to pick it up because the fumes were increasing and not
> abating!.)
>
> Then there were incompatibilities between different PL259's,
> for example, some have a shoulder deep inside which prevents
> the braid from reaching the soldering holes.
>
> Then a PL259 where the thread of the locking tube was longer
> than the thread of the SO239 inside the antenna so it didn't lock
> the outer and the whole plug swivelled loosely.
>
> Separate cable from antenna and both show open circuit, as you'd
> expect. Couple them together and 200 Ohm loop resistance. Ignoring
> any RF theory, coupling together two open circuits, one on a PL259
> and the other on a SO239 just cannot result in a resistance of 200
> Ohms! It's plain ornery DC electricity!
>
> I'm banging my head against the wall! Any suggestions?
>
>
>
>
Bang harder

1513. A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 21:01:07 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nku6pF1qd1nU1@uni-berlin.de>
Source record: 91234

"Howard" <mensch90249> wrote in message
news:9qn8h0ptn9r4un2f60lv9uv1esouq6bfs5@4ax.com...

> Glad I could help. I've logged several Colorado hams so I'm sure
> we'll bump into each other once you're up and running ..... and the
> propogation cooperates.
>
> 73,
> Howard
>

I did some thinking last night. Specifically, *where* do I want to talk to? All over? Not practical - to the west on the roof I have a large metal structure and 18 miles west the rocky mountains start up. No, I don't want to talk west. North? Yea, right - there are like 5 hams north of colorado. No, north is out. South? Maybe but not really.

No, my main target is those states NE, E and SE of me - Illinois, Virginia, Ohio, Kansas, Texas, Florida - in those areas.

So, if my interests are directed then why shouldn't my antenna be?

A-HA! A beam! But what kind of a beam..... Hmmm - something I could build, cheap (in case this didn't work and I have to go back to plan A) and easy.

A Quad! Yes! And only 3 elements - no more - that way I've got a 3db beamwidth of about 66 degrees. That's enough to cover all of my target areas without a rotor! Even Better! What's more, I won't be picking up as much noise from areas I don't want to hear like S, W & N.

So, off to Home Depot to buy stuff.
Pine 1x2x8 for a boom $1.09
12 - 1/4"x48" hardwood dowels for spreaders @ .37 ea.
Speaker wire for the elements, 3.5 cents a foot.

Total with tax $9.09

4 hours later, it's up & tuned. I was a bit suprised - I worked out a length of 239.523" for the driven element but that ended up resonating around 47 mhz. I eventually ended up cutting almost 7" off it to get it to resonate at the design freq, 50.35 mhz.

I'm worried that my other math may be off, too. Here's the specs:

Reflector - 245.482"
Driven el. 239.523" (original size)
Director - 232.373
Reflector/driven element spacing - 43.495"
Driven element/Director spacing - 35.749"
22g speaker wire elements.
Choke at the feedpoint - 2-5/8" form, 9 turns
air wound rg-58 coax.
Total feedline - RG58 58.5'

2:1 SWR bandwidth - 1.6 mhz - 1:1 SWR @ 50.350

Should I trim 7" off the director? What about the reflector?

Note: a repeater, on the backside of the bean, used to
take 68 watts of FM to key up with the Inverted V . Now
with the beam, it only takes 38 watts.

Ken KG0WX

1514. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 21:05:02 UTC
From: Philip de Cadenet <Philstheboss@thebbc.fslife.co.uk>
Message-ID: <QVjEkRK+PUFBFw0s@philstheboss.freeserve.co.uk>
Source record: 91235
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

>Now, where to get some nylon rod of 40mm diameter to
>turn up a replacement for the insulated base, which was destroyed
>in the investigative process?

Yellow Pages under Plastics engineering or machining.

These guys normally have a box full of offcuts of all different
plastics, rod, bar, tube etc.
--
Philip de Cadenet G4ZOW
Transmitters 'R' Us
http://www.transmittersrus.com

1515. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 21:28:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hlhah0lj41fh79bc20qrp12g8jac8qrcg4@4ax.com>
Source record: 91236

On Sat, 07 Aug 2004 16:22:47 -0400, Mike Coslo <mcoslo@adelphia.net>
wrote:

>My interest especially is that my own county has tremendously varying
>soils and geology (Centre County in Pennsylvania) It would be very
>interesting to lay a geological map ofer a soil conductivity map and
>compare.

Hi Mike,

From the soil maps I've sent you, I can only guess that your area is a
Silty Loam to Loam in nature. There is not much Clay content, but
across the state your Sand content varies by 20% and your soil is
dominated by Silt.

You (or anyone who cares - an albeit small population here) can make
their own soil determination through a rather simple technique, but
this begs the obvious that such measurements are confounded by RF
ground penetration and extent of field coverage even within the back
yard. In other words, if you are not committed to take half a dozen
samples of soil, from various depths and ranges from the proximity of
the antenna - then why bother worrying about it? There is absolutely
nothing you can do to change anything - even salting the ground with a
ton of exotic mineral makes hardly a thin veneer largely ignored
anyway.

You might find that there are some interesting correlations between
soil types and conductivity though. And such correlations do not
always toe the line in accord with the oft-repeated characteristics
taken for granted here.

Soil is not a simple system that can be reduced to two variables for a
program. ;-)

73's
Richard Clark, KB7QHC

1516. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 21:31:27 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cf3hnflj1@titan.btinternet.com>
Source record: 91237

The silence is deafening.

Does NO-one want to know the significance of 118.5 ?

;o) ;o) ;o) ;o) ;o) ;o)

Reg, G4FGQ

1517. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 21:48:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fqiah0lgpf3834p74rrok11ub2vsnum51l@4ax.com>
Source record: 91238

On Sat, 07 Aug 2004 21:28:31 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>your area is a Silty Loam to Loam in nature.

Hi All,

It just occurred to me that this is the same soil type as K9SQG
enjoys. Where argument arose over the term "identical," then I
suppose there is some latitude here - but not so much such that Mike
is likely to experience a very low conductivity to that of the same
soil in Kansas. 10:1 variation is more than latitude, or perhaps
longitude answers it? Does the software ask for geographic location?

To this point of similarity, the question becomes: would Mike
experience the same noticeable performance variation in greater radial
length that K9SQG finds? It is obviously not exhibited in software as
this report has confounded Reggie.

Has anyone downloaded this work to make their own determination? How
did you choose the variable valuations it asks to be entered?

73's
Richard Clark, KB7QHC

1518. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 22:15:41 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nl2j6F1nncuU1@uni-berlin.de>
Source record: 91239
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean, village idiot" <me@privacy.net> wrote in message
news:2nktr8F1tq81U1@uni-berlin.de...
> After a bit of destructive investigation, the problem was caused
> by a screwed brass stud - not dissimilar to the 3/8 stud at the
> base of CB antennae, but slightly smaller in diameter.
>
> When the base part of the radiating element had been screwed in
> place onto this stud, instead of the base screwing onto the
> stud, the stud had, in part, unscrewed itself down into the
> plastic insulator, by several turns. Unfortunately (for me and my
> friend) also in the base was a 4-turn loading coil which had not
> taken kindly to being unscrewed by at least 4 turns, and had
> deformed so that it was intermittently shorting to the ground
> plane through the tarnish of the loading coil.
>
> Now, where to get some nylon rod of 40mm diameter to
> turn up a replacement for the insulated base, which was destroyed
> in the investigative process?
>
Bleedin' Nick's Place, you just couldn't make it up. What a total prat.
> >
> > I'm banging my head against the wall! Any suggestions?
> >
Have you told your doctor about your latest self inflicted injury?
...(_!_)...

1519. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 22:28:35 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nl3bbF21i9hU1@uni-berlin.de>
Source record: 91240
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Airy R. Bean, village idiot" <me@privacy.net> wrote in message
news:2njlieF1efb1U1@uni-berlin.de...
> SWR - Succulent With Ratatouille.
>
A - Arrogant
I - Ignorant
R - Rude
Y - Yob

R - Ridiculous

B - Bullshit
E - Excrement
A - Anal
N - Nasty

...(_!_)...

1520. Re: A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 22:47:51 UTC
From: Howard <mensch90249>
Message-ID: <lcjah0dikib694vtai1ijiqmtnn5udj9pl@4ax.com>
Source record: 91241

On Sat, 7 Aug 2004 15:01:07 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>snip<
>I did some thinking last night. Specifically, *where* do I want to talk
>to? All over? Not practical - to the west on the roof I have a large
>metal structure and 18 miles west the rocky mountains start up. No,
>I don't want to talk west. North? Yea, right - there are like 5 hams
>north of colorado. No, north is out. South? Maybe but not really.
>
>No, my main target is those states NE, E and SE of me - Illinois,
>Virginia, Ohio, Kansas, Texas, Florida - in those areas.
>
>So, if my interests are directed then why shouldn't my antenna be?
>
>A-HA! A beam! But what kind of a beam..... Hmmm - something
>I could build, cheap (in case this didn't work and I have to go back
>to plan A) and easy.
>
>A Quad! Yes! And only 3 elements - no more - that way I've got
>a 3db beamwidth of about 66 degrees. That's enough to cover all
>of my target areas without a rotor! Even Better! What's more, I
>won't be picking up as much noise from areas I don't want to hear
>like S, W & N.
>
>So, off to Home Depot to buy stuff.
>Pine 1x2x8 for a boom $1.09
>12 - 1/4"x48" hardwood dowels for spreaders @ .37 ea.
>Speaker wire for the elements, 3.5 cents a foot.
>
>Total with tax $9.09
>
>4 hours later, it's up & tuned. I was a bit suprised - I worked
>out a length of 239.523" for the driven element but that ended
>up resonating around 47 mhz. I eventually ended up cutting almost
>7" off it to get it to resonate at the design freq, 50.35 mhz.
>
>I'm worried that my other math may be off, too. Here's the specs:
>
>Reflector - 245.482"
>Driven el. 239.523" (original size)
>Director - 232.373
>Reflector/driven element spacing - 43.495"

>Driven element/Director spacing - 35.749"
>22g speaker wire elements.
>Choke at the feedpoint - 2-5/8" form, 9 turns
>air wound rg-58 coax.
>Total feedline - RG58 58.5'
>
>2:1 SWR bandwidth - 1.6 mhz - 1:1 SWR @ 50.350
>
>Should I trim 7" off the director? What about the reflector?
>
>Note: a repeater, on the backside of the bean, used to
>take 68 watts of FM to key up with the Inverted V . Now
>with the beam, it only takes 38 watts.
>
>Ken KG0WX
>
>
Ken,
On behalf of the hams in 6 & 7 land I feel compelled to inform you of how insulted we are that you do not wish to talk with us - we aren't bad folks .....really 8-}

As to trimming the director & reflector, my advice is yes - you should maintain the 'geometry' of a quad. The difference isn't likely to show up [very much] in a VSWR measurement but it may well affect the pattern and F/B ratio. Enough difference to make vs not make a contact I can't say - but as long as you're in a motivated mood you might as well make it "as close to right" as possible. Otherwise, the first time you can't complete a QSO with a guy in some truly far away location and the guy down the block could you'll keep wondering "did that 7 inches screw me up?"

I am curious as to your choice of 22 gage wire: I've only made one quad (a quagi actually) and used 12 gage wire - and I don't have icing to contend with whereas you do. Is the 22 gage going to be permanent or was this more experimental and if it works it will be made more robust (larger wire, weatherproofing of wood)? In any case, from what you mention (power needed to hit a repeater) you've already made a significant improvement in your station and I'm sure that will really be noticed when working simplex.

Have fun & 73,
Howard KE6MAK

1521. Re: tuneing cushcraft r7 on 4ft poll

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 23:27:39 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41156590.FC385273@shaw.ca>
Source record: 91242

DAVID BROWNE wrote:
>
> hi i am trying to tune the r7 on 4ft poll, i know they tell you to use 8ft
> poll
> will this make this much difference,
> 10 meters is ok
> 12 meters is ok
> 15 meters, swr 1.6 at 21.7mhz
> 17 meters swr 2.1 at 18.111, swr of 1.8 at 18.168
> 20 meters , 2mhz out 12.455mhz swr of 1.2
> 30 meters swr 10:1 at 10.150mhz 9.011mhz swr of 5.2
> 40 meters swr of 2.1 at 6.395
> don't know if traps measurements are ok as i got this second hand
> measurements between traps are
> A 123"
> B 10.5/8"
> C 6"
> D 16"
> E 16"
> F 25"
> I AM IN THE UK SO I WANTED 40 METERS AT 7.05-7.1MHZ
> is the 30meter trap not working
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.734 / Virus Database: 488 - Release Date: 04/08/2004

I set my dimensions on the ground according to the manual, put the 40M dimension at
the CW end (as per manual) and then put it up at 8 ft. I've never had a
problem and everything came out as per the manual.
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP

Calgary, Alberta, Canada

1522. Re: A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-07 23:51:32 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nl87aF234hpU1@uni-berlin.de>
Source record: 91243

"Howard" <mensch90249> wrote in message
news:lcjah0dikib694vtai1ijiqmtnn5udj9pl@4ax.com...

> Ken,
> On behalf of the hams in 6 & 7 land I feel compelled to inform you of
> how insulted we are that you do not wish to talk with us - we aren't
> bad folks ....really 8-}
>
> As to trimming the director & reflector, my advice is yes - you should
> maintain the 'geometry' of a quad. The difference isn't likely to
> show up [very much] in a VSWR measurement but it may well affect the
> pattern and F/B ratio. Enough difference to make vs not make a
> contact I can't say - but as long as you're in a motivated mood you
> might as well make it "as close to right" as possible. Otherwise, the
> first time you can't complete a QSO with a guy in some truly far away
> location and the guy down the block could you'll keep wondering "did
> that 7 inches screw me up?"
>
> I am curious as to your choice of 22 gage wire: I've only made one
> quad (a quagi actually) and used 12 gage wire - and I don't have icing
> to contend with whereas you do. Is the 22 gage going to be permanent
> or was this more experimental and if it works it will be made more
> robust (larger wire, weatherproofing of wood)? In any case, from what
> you mention (power needed to hit a repeater) you've already made a
> significant improvement in your station and I'm sure that will really
> be noticed when working simplex.
>
> Have fun & 73,
> Howard KE6MAK

Didn't mean to offend - I used to live in Vegas and was raised in L.A.
but the mountains! The mountains! Heck - I'm shocked when I hear
WWVH on 15 mhz! Maybe she's coming in long......nah - couldn't be.

22 g insulated speaker wire is suprisingly robust stuff - mind you I
wouldn't
want to put up a 160m beverage with the stuff but for 10m dipoles, 6m
dipoles & quads, it's fine. I went through the whole last winter here
with a 153'6" dipole made up of - yep - 22 ga speaker wire. Now, it
was wrapped around the building but other than snagging on the
corners it was un supported. We had snow, ice, falling branches - no
breakage.

I found a beacon 5 miles away - 20w into a loop. On my Van Gordon all bander, with the 857's 20db attenuator on, the beacon is S0. With the same pad on but on the Quad, S-15+! The location of the beacon is about 25 degress left of where the quad is pointing.

I also tried the beacon on other antennas at the worst, I can just hear it with a 3' wire stuck into my rigs antenna socket (no att pad). With no pad & IPO off & on the Quad - BOOM!

As to the repeater - I'll shorten the reflector 3" later and see if I need more power to kerchunk it - my guess is yes, due to the fact the repeater is behind the antenna and adjusting the reflector should improve the F/B ratio.....

Neat stuff, these antennas!

Ken KG0WX

1523. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 00:39:15 UTC
From: "aunwin@insightbb.com"
Message-ID: <TCeRc.91041$8_6.72974@attbi_s04>
Source record: 91244

My bet is that your county seat does in fact have all the data you need. My county has a couple of books of such things which is updated every 20 years for county planning. This includes flood plains, sand deposits,gravel and specific types of earth which does vary in Central Illinois which is about as far as the ice age moved and left us as the highes point between Chicago and New Orleans. Thus makes us more windier than Chicago known as the windy city. Many years ago it was said that 1/3 of the QSLs for the 9 th district were for a few Central Illinois counties. Top soil in this area has a depth of at least 12" and is black coloured when tilled
Art

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:2f-dneW0v-eKp4jcRVn-ug@adelphia.com...
> Richard Clark wrote:
>
> > On 07 Aug 2004 00:42:05 GMT, k9sqg@aol.com (K9SQG) wrote:
> >
> >>From my research I've found indications that radial length beyond a
quarter
> >
> >>wavelength is indeed significant out to about two wavelengths.
> >
> >
> > Hi OM,
> >
> > Are you located near South Charleston? The soil in your region is a
> > Silty Loam. In comparison to Manhattan Kansas, which is 4 times more
> > conductive (probably a good indicator of your longer radials
> > effectivity), the soil characteristics (that pesky permittivity, no
> > one has a clue to guess) are identical. You could be worse off in
> > conductivity in Pendleton Oregon, but you would not be able to tell
> > the difference in the soil.
> >
> > Three identical soils (ALL silty loams), three totally different
> > characteristics. Anyone try Reggie's program to figure out why? Or
> > is this a situation where you have to know the answer to find the
> > solution? ;-)
>
> Richard, where do you get the information? It would be wonderful to
> have a map of soil types that goes into some detail. I've downloade the
> map from the FCC, but that doesn't have any real detail in it.
>
> My interest especially is that my own county has tremendously varying
> soils and geology (Centre County in Pennsylvania) It would be very

> interesting to lay a geological map ofer a soil conductivity map and
> compare.
>
> - Mike KB3EIA -
>

1524. Re: A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 00:42:27 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nlb6fF1iitsU1@uni-berlin.de>
Source record: 91245

OK, I went and shortened the reflector - result? The signal from forward (the CW beacon) dropped slightly and the power needed to key the repeater (on the back side) went *down* by about 1.5 db! So, my F/B ratio got worse!

So, I went the other way - not only did I replace the 3" I took out, I made the reflector 1" longer than when I started. Got down stairs and the beacon had gone from S9+15 to S9+20 and the power needed for the repeater had gone back to 3-4 watts higher than it was before.

Interestingly, resonant frequency went up about 100 kc.

So, back I go upstairs...

This time I remove the director completley! Results? No change in forward gain but a 50% decrease in rearward efficiancy......

Now, back up stairs - I'm gonna shorten the director 3"... brb...

OK, I'm back - put the director back on but shortened it 4".

Not good! The power to hit the repeater went from 48 w to 24w and the resonant freq jumped almost 800 kc! Plus, there was no signal improvement from the front.....

Back on the roof I go.....

OK, I'm back - SWR is back to where it should be, F/B ratio seems back to where it was, forward gain is back....whew!

I'm done for the day - time to kick off my shoes, have a tall glass of ice tea and some dinner (maybe - I'm trying, with 92.5 lbs of success in 8m so far, to loose weight....)

Someone who knows what's what - based on what just happened, can I assume my antenna is pretty close to optimum the way it is?

Ken KG0WX

1525. Re: A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 01:44:58 UTC
From: Howard <mensch90249>
Message-ID: <6q0bh01pkf4kf24odquuti9hsf7kj47tgb@4ax.com>
Source record: 91246

On Sat, 7 Aug 2004 18:42:27 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>OK, I went and shortened the reflector - result? The signal from
>forward (the CW beacon) dropped slightly and the power needed
>to key the repeater (on the back side) went *down* by about 1.5
>db! So, my F/B ratio got worse!
>
>So, I went the other way - not only did I replace the 3" I took out,
>I made the reflector 1" longer than when I started. Got down
>stairs and the beacon had gone from S9+15 to S9+20 and the power
>needed for the repeater had gone back to 3-4 watts higher than it
>was before.
>
>Interestingly, resonant frequency went up about 100 kc.
>
>So, back I go upstairs...
>
>This time I remove the director completley! Results? No change in
>forward gain but a 50% decrease in rearward efficiancy......
>
>Now, back up stairs - I'm gonna shorten the director 3"... brb...
>
>OK, I'm back - put the director back on but shortened it 4".
>
>Not good! The power to hit the repeater went from 48 w to 24w and
>the resonant freq jumped almost 800 kc! Plus, there was no signal
>improvement from the front.....
>
>Back on the roof I go.....
>
>OK, I'm back - SWR is back to where it should be, F/B ratio seems
>back to where it was, forward gain is back....whew!
>
>I'm done for the day - time to kick off my shoes, have a tall glass of ice
>tea and some dinner (maybe - I'm trying, with 92.5 lbs of success in 8m
> so far, to loose weight....)
>
>Someone who knows what's what - based on what just happened,
>can I assume my antenna is pretty close to optimum the way it is?
>
>Ken KG0WX
>

>
Ken,
First off, not offended by your choice of where the quad is pointed,
was just tyring to be humorous.

Sounds like you're getting in some exercise with this project!
Offhand I'd say you've got it as good as it gets so just set back and
enjoy it as is. Otherwise you'll also start playing with element
spacing too and then you'd end up making trips up and down the stairs
and still end up about where you are now. As to the 22 gage holding
up well, that's good news: I tend to follow the first rule of
structural design ..... if a little bit is good then more is better,
thus the recommendation for a larger wire.

Howard

1526. Re: New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 02:41:33 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <4oGdnWNUFYVAD4jcRVn-uQ@adelphia.com>
Source record: 91248

Brian Kelly wrote:

> Mike Coslo <mjc5remove@psu.edu> wrote in message news:<4113ABB7.7070300@psu.edu>...
>
>>Last night I put up my new home-brew Off Center Fed antenna.
>>
>> It's around 50 feet up, 135 feet in total length. There is a small
>>section, ~30 feet that hangs down from the long end, due to lack of
>>distance between trees.
>>
>> Initial SWR readings are acceptable on all bands, but I'll be doing
>>some trimming to see if I can't nudge them down a little more.
>>
>> I haven't transmitted yet, save for some low power checks on each band,
>>and a 100 watt power check on the band with the worst SWR to see that
>>the PA amp didn't fold back. All fine there.
>
>
> Then stop right there before you screw it up.

HA! Too late! Well, I didn't really screw it up, but I did do a little
experiment to see which way I was going on the SWR since I made the
antenna a littel longer than calculated. Sure enough, the SWR got worse
when I added a bit onto the end. But now I'll have to wit until tomorrow
to remove it. But you're so right.

>>My question is, is there any good trick to the end with the "hangy down
>>part"?
>
>
> No.
>
>
>> Initially, I have run the wire thorough the insulator, and Ty-wrapped
>>the outgoing wire to the incoming one, then let it drop. Or should I run
>>the wire to the insulator in the normal way, then attach the tail with
>>solder? I'd prefer to keep the wire in one piece if possible.
>
>
> None of it makes any difference electrically. If the element conducts
> any which way you build the "tail" and solder it yer done. The rest of
> it involves common sense mechanical integrity/reliability sorts of
> considerations.

Excellent. I figured as much but wasn't sore.

- Mike KB3EIA -

1527. Re: New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 02:43:41 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <4oGdnWJUFYXADojcRVn-uQ@adelphia.com>
Source record: 91249

Hal Rosser wrote:

> I've heard of folks running the antenna wire through a pully then tying off
> the hangy-end with an insulator to keep it from swinging and getting tangled

Good idea. Anything that lessens the "sway pull" on the wires would be
a pretty good thing, IMO.

- Mike KB3EIA -

1528. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 03:09:26 UTC
From: tox <abc@bcafafafa.couk>
Message-ID: <GPgRc.1541$JP2.188@newsfe1-gui.ntli.net>
Source record: 91247
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nkifcF1rpiaU1@uni-berlin.de...
> Now trying to install
> it at my friend's QTH to get him going
>
LIAR, you don't have ANY friends...

1529. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 03:55:35 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-CDC08C.20553507082004@morgoth.sfu.ca>
Source record: 91250

In article <4113b703$1_3@127.0.0.1>, Cecil Moore <w5dxp@hotmail.com>
wrote:

> Steve Nosko wrote:
> > I'm
> > surprised off-center feed isn't used more. It gets you away from feeding
> > two ends of multiple half waves.
>
> It also guarantees unbalance at the feedpoint since the
> impedance looking one direction is different from the
> other direction.

Put two of them at right angles with coincident feedpoints and tie the
long side of one to the short side of the other.

I came up with this idea about 1954. Has anyone turned EZNEC loose on it
to see what the patterns would look like on various bands?

David, ex-W8EZE

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

1530. Re: Buried Radials - a new look!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 04:56:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5nbbh0pbjebm3po2qjrq6vpppt0riob0fm@4ax.com>
Source record: 91251

On Sun, 08 Aug 2004 00:39:15 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>My bet is that your county seat does in fact have all the data you need. My
>county has a couple of books of such things which is updated every 20 years
>for county planning. This includes flood plains, sand deposits,gravel and
>specific types of earth which does vary in Central Illinois which is about
>as far as the ice age moved and left us as the highes point between Chicago
>and New Orleans. Thus makes us more windier than Chicago known as the windy
>city. Many years ago it was said that 1/3 of the QSLs for the 9 th district
>were for a few Central Illinois counties. Top soil in this area has a depth
>of at least 12" and is black coloured when tilled
>Art

Hi Art, All,

You have the advantage over Mike and K9SQG in the conductance
characteristic being double or better over them. You also live in a
different (I hope there are those who notice I am not talking about
identicals now) soil - it being somewhere between a Silty Clay and a
Silty Clay Loam. This is to say it has more clay and less sand
content than their soils. This also portends a correlative ... until
you look at more examples to see that theory dashed (soil is not a
simple system reducible to software employing two variables).

To this point of difference, the question becomes: would Art
experience the same noticeable performance variation in greater radial
length that K9SQG finds? It is obviously not exhibited in software as
this report has confounded Reggie.

You (or anyone who cares - an albeit small population here) can make
their own soil determination through a rather simple technique, but I
note the bated response to this subtle offer and find it possibly
correlates with suspended interest (the long way of saying boredom
with the topic ;-) Would it be indelicate to mention it could be done
in the kitchen?

73's
Richard Clark, KB7QHC

1531. moxon vs quad

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 07:52:15 UTC
From: Ken Luther <sparkzz@aol.com>
Message-ID: <pan.2004.08.08.07.52.15.715629@aol.com>
Source record: 91252

Hello,

Has anyone ever done any comparisons between a moxon rectangle and a
2 element quad on 20 meters??

tnx and 73's
KD5ZCL

1532. Re: A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 08:28:44 UTC
From: kashe@sonic.net
Message-ID: <01pbh0d7jkisdc6v2mqobqnubn30flqt1u@4ax.com>
Source record: 91253

On Sat, 7 Aug 2004 18:42:27 -0600, "Ken Bessler"
<kg0wx@NOSPAMyahoo.com> wrote:

>
>I'm done for the day - time to kick off my shoes, have a tall glass of ice
>tea and some dinner (maybe - I'm trying, with 92.5 lbs of success in 8m
> so far, to loose weight....)
>

With all the time you spend going up and down stairs to tweak
and test this antenna, I'm not really surprised. :-)

We eagerly await publication of your book on the Quad Antenna
Weight Loss Plan. Stay with it.

1533. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 08:47:15 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nm7mvF1ueloU1@uni-berlin.de>
Source record: 91254
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

<lucifer@eternal-flames.gov> wrote in message
news:44mbh0pv0pc776r2bnodojalijjh3scn2c@4ax.com...
> On Sat, 7 Aug 2004 23:28:35 +0100, "Frank Turner-Smith G3VKI"
> <g3vki@turner-smith.co.uk>, took time away from the true obsession of
> his life - his extensive collection of earwax and toenail clippings -
> to write:
>
> >A - Arrogant
>
> FFS Grow bleedin' up!
>
> You're becoming bloody obsessive about the daft bugger.
>
> Old Nick.

Welcome back, Sire.
--
;>)
666 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1534. w5gi

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 09:03:00 UTC
From: Jayne Medley <kjm52@blomand.net>
Message-ID: <cf4q83$5j1g$1@news3.infoave.net>
Source record: 91255

Someone with a W5GI antenna up let me know what they think . Do not want to waste time if it does work Tnx

1535. Re: A change of plans.... WAS: Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 09:58:28 UTC
From: Ken Bessler <kg0wx@NOSPAMyahoo.com>
Message-ID: <2nmbpuF299i3U1@uni-berlin.de>
Source record: 91256

<kashe@sonic.net> wrote in message
news:01pbh0d7jkisdc6v2mqobqnubn30flqt1u@4ax.com...
> On Sat, 7 Aug 2004 18:42:27 -0600, "Ken Bessler"
> <kg0wx@NOSPAMyahoo.com> wrote:
>
>
> >
> >I'm done for the day - time to kick off my shoes, have a tall glass of
ice
> >tea and some dinner (maybe - I'm trying, with 92.5 lbs of success in 8m
> > so far, to loose weight....)
> >
>
> With all the time you spend going up and down stairs to tweak
> and test this antenna, I'm not really surprised. :-)
>
> We eagerly await publication of your book on the Quad Antenna
> Weight Loss Plan. Stay with it.
>

I'll tell ya what - not only have I dropped from 302+ to 209, but I've gone from 1,000 mg Glucophage and 570 units of insulin ($58/1000u) shots per day to no diabetes meds whatsoever. At the same time, my blood sugars have stabilized to the point of being equal to non diabetic numbers, my blood pressure is under control, my cholesterol is improving fast & even my diabetic liver damage has healed itself 60%. All since new years.

All I've done is restrict carbs, calories & processed foods plus daily excercise
on my Bianchi road race bike (10 miles minimum per day).

Eat right & excercise - duuuuuuhhhh.....

Ken

1536. Re: moxon vs quad

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 12:01:05 UTC
From: Rudy <rudy@nospam.com>
Message-ID: <41161600.5D7374C9@nospam.com>
Source record: 91257

Hi Ken

http://www.cebik.com

Dr. Cebik has all extensive model data for various antenna,
including Moxon, wire, Yagi and quads.

73

Ken Luther wrote:

> Hello,
>
> Has anyone ever done any comparisons between a moxon rectangle and a
> 2 element quad on 20 meters??
>
> tnx and 73's
> KD5ZCL

1537. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 12:23:01 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2nmk96F21s8sU1@uni-berlin.de>
Source record: 91258
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2nktr8F1tq81U1@uni-berlin.de...
> After a bit of destructive investigation, the problem was caused
> by a screwed brass stud - not dissimilar to the 3/8 stud at the
> base of CB antennae, but slightly smaller in diameter.
>
> When the base part of the radiating element had been screwed in
> place onto this stud, instead of the base screwing onto the
> stud, the stud had, in part, unscrewed itself down into the
> plastic insulator, by several turns. Unfortunately (for me and my
> friend) also in the base was a 4-turn loading coil which had not
> taken kindly to being unscrewed by at least 4 turns, and had
> deformed so that it was intermittently shorting to the ground
> plane through the tarnish of the loading coil.
>

Sounds like you fettled a perfectly good antenna. I am surprised you have
not claimed "shoddy goods" and cast it into the bin.

You seem very cack handed for someone who claims to do model engineering and
home brew your own radio equipment.

Just at it did at Westinghouse, the truth is emerging. You can't write
software and you can't do hardware.

Back to shelf stacking in a supermarket.

1538. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 12:24:06 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2nmkb7F2chksU1@uni-berlin.de>
Source record: 91259
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Binary Era" <me@privacy.net> wrote in message
news:42hah0dq28klmat7h7l6drhtjrvpvqu6t0@4ax.com...
> Madame Ariy sic R. "Royal" Bean wrote:
>
> >Does anyone have experience of the antenna of the title, which came
> >with all 3 suppliers info included? I purchased it at Longleat about
> >5 years ago, but never got round to using it. Now trying to install
> >it at my friend's QTH to get him going
> >
> >I've just spent a very frustrating afternoon trying to put
> >this thing up, and when it was up, it exhibited a resistance of
> >200 Ohm between coax inner and outer.
> >
> >Assumption - error in soldering PL259 - no - still does it.
> >
>
> On 27/06/04 you posted the following:
>
> "Apart from wave guide joiners, it is the maximum frequency of use
> which is the main consideration - your N plugs are usable right down
> to DC. and will, in fact, give a better DC than any banana plugs 'cos
> a step function has infinite AC frequencies in it which are better
> preserved by the N."
>
> Perhaps the antenna manufacturers were following your theory, and had
> introduced a 200 Ohm step-function to "better preserve the infinite AC
> frequencies". HTH

Google is you friend. Unless you are a still prat like Gareth ;-)

1539. SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 12:56:21 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10hc8njhtreuh89@corp.supernews.com>
Source record: 91260

Recently started to renew my interest in ham radio and so pulled out some old equipment.

I set up a temporary antenna yesterday and connected it to my rig, including an MFJ Versa Tuner II (Model MFJ-949D), purchased about 15 years ago.

Setting the transmitter (Icom-725) to low output power (about 10W) I closed the CW key and the tuner indicated about 15W of forward power, and no reflected power. That is, it "indicated" a SWR of 1:1. Unlikely, to say the least.

The reflected power meter just doesn't move at all. Regardless of band. Thus, I am convinced that something is wrong with it (it has been moved twice since purchase). I did open the case and nothing looks out of order. Touching the reflected meter terminals with an ohm meter causes the reflected meter needle to jump, so it appears that the meter itself is working.

The antenna seems to work very well for receiving. And I am able to "get out", as it were. I can hear myself on a little SW radio I have at 14.2 MHz in AM.

Questions:

Any thoughts as to where to look for the "problem" with the tuner?

Is there another way to determined SWR with just the meters on the transmitter (RF power out) and the forward power meter on the tuner?

Thanks in advance.

73s,

Thomas

1540. Re: SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 13:10:17 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <ZCpRc.7275$nx2.3163@newsread2.news.atl.earthlink.net>
Source record: 91262

> I set up a temporary antenna yesterday and connected it to my rig,
> including an MFJ Versa Tuner II (Model MFJ-949D), purchased about 15
> years ago.
>
> Setting the transmitter (Icom-725) to low output power (about 10W) I
> closed the CW key and the tuner indicated about 15W of forward power,
> and no reflected power. That is, it "indicated" a SWR of 1:1.
> Unlikely, to say the least.
>
> The reflected power meter just doesn't move at all. Regardless of band.
> Thus, I am convinced that something is wrong with it (it has been
> moved twice since purchase). I did open the case and nothing looks out
> of order. Touching the reflected meter terminals with an ohm meter
> causes the reflected meter needle to jump, so it appears that the meter
> itself is working.
>
> The antenna seems to work very well for receiving. And I am able to
> "get out", as it were. I can hear myself on a little SW radio I have at
> 14.2 MHz in AM.
>
> Questions:
>
> Any thoughts as to where to look for the "problem" with the tuner?
>
> Is there another way to determined SWR with just the meters on the
> transmitter (RF power out) and the forward power meter on the tuner?

You can look at the power and then interchange the input and output of the meter to see what the swr actually is when you are not using the switches in the tuner position but in the bypass position.
Thank I would look at the diode first to see if it good. Being a MFJ you may need to see if any of the connections are loose. I have one similar to that tuner and the first thing I did was open it up and tighten up all the loose screws. Bought It new at a hamfest from a dealer and when I got it home I noticed it making a noise when moving it around. Found a loose nut and washer inside it.

1541. Re: SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 13:11:28 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <oCpRc.25597$Jo1.845@lakeread01>
Source record: 91261

"Thomas" <nospam@nospam.com> wrote in message
news:10hc8njhtreuh89@corp.supernews.com...
> Recently started to renew my interest in ham radio and so pulled out
> some old equipment.
>

If you were getting Forward power on the meter, then the meter
movement is obviously good.

If the meter was working when stored, that
might likely rule out the most
likely failure--a bad diode in the coupler. It could be
a bad diode, but less likely. My first suspicion
would be a dirty switch contact on the Forward/Reverse switch
at this point.

Now, there is no way you are going to determine lowest
SWR with the meter the way it is. You could install the
meter "backwards", antenna to equipment side of meter,
vica versa, and that would let the meter show minimum
SWR if you had to.

Pete

1542. Re: SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 13:16:56 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <cJpRc.6963$cT6.5918@fe2.columbus.rr.com>
Source record: 91263

Put a resistor on one of the unused coax connectors on the 949D, 100 or 25 ohms should give you a 2:1 swr.
I put a 25 ohm on my 949D and for 10 watts in read 1 watt reflected. It could also just need recalibrated, I
borrowed a friend's Bird and calibrated both the HI and LOW settings. Works better now.

73
Richard WB8KRN

> Any thoughts as to where to look for the "problem" with the tuner?
>
> 73s,
>
> Thomas
>

1543. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 14:45:50 UTC
From: Starr <thick.as@plank.net>
Message-ID: <cf5eb0$31r$0@pita.alt.net>
Source record: 91264
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
news:2nl3bbF21i9hU1@uni-berlin.de...
> "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
> news:2njlieF1efb1U1@uni-berlin.de...
> > SWR - Succulent With Ratatouille.
> >
> A - Arrogant
> I - Ignorant
> R - Rude
> Y - Yob
>
> R - Ridiculous
>
> B - Bullshit
> E - Excrement
> A - Anal
> N - Nasty
>
> ...(_!_)...
>
>
Beany can be a huge arsehole at times but now you are attacking him on
inoffensive remarks.
Not good.

--
S
--
I live my life like I play games, I cheat.
-
Trolls are your enemies, wipe them out.
http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
-

1544. Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 15:03:11 UTC
From: W8LU <w8lu@semdxa.org>
Message-ID: <b2gch0h1rnrrkaq13cmmq68vc17dfauf1l@4ax.com>
Source record: 91265

I'm looking for a source of radial wire. Possibly I can order over
the internet. Do you have any suggestions?
Tnx es 73 de Ken, W8LU

1545. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 15:04:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4116425a$1_8@corp.newsgroups.com>
Source record: 91266

David Ryeburn wrote:
> Put two of them at right angles with coincident feedpoints and tie the
> long side of one to the short side of the other.

If I understand your description, the result is two balanced
dipoles arranged in horizontal V's. The low impedance of the
two long wires at their 1/2WL resonant frequency will keep
much current from flowing in the shorter wires. It seems
your idea is just two paralleled dipoles with 90 degrees
between the dipole elements.
--
73, Cecil http://www.qsl.net/w5dxp

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1546. Re: SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 15:08:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41164337$1_8@corp.newsgroups.com>
Source record: 91267

Thomas wrote:
> Any thoughts as to where to look for the "problem" with the tuner?

Using low power, hook up the antenna tuner backwards so the
reflected power reading is actually indicating forward power
and vice versa. If the reflected power meter needle doesn't
move, you've got a hardware problem.
--
73, Cecil http://www.qsl.net/w5dxp

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1547. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 16:22:08 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <nlkch0ddtpiidn9bmj6a37nvmhh4om5g46@4ax.com>
Source record: 91268

On Sun, 08 Aug 2004 11:03:11 -0400, W8LU <w8lu@semdxa.org> wrote:

>I'm looking for a source of radial wire. Possibly I can order over
>the internet. Do you have any suggestions?
>Tnx es 73 de Ken, W8LU

Been looking for the same, myself. Best I've found is
http://www.davisrf.com/amateur.htm
$36.50 for 1000 feet bare 16-guage.

Otherwise, places like Home Depot have 500 feet bare 8 guage for $69.

Guess it depends on how heavy you want to go.

bob
k5qwg

1548. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 18:12:31 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408081012.5194a2f6@posting.google.com>
Source record: 91269

fractenna@aol.com (Fractenna) wrote in message
news:<20040806154522.16456.00000927@mb-m14.aol.com>...
> >A consultant has to work for more than cost since he isn't working all
> >year..
>
> Why not?
>
> If there are gigs out there, many do work all year long--save for reasonable
> vacation. I know several.

I did four uninterrupted years on one gig for DuPont in the 1980s. Not
counting some very long weekends in FL and such. Some of which I
hustled them into financing.

> The going rate is just not in the $100/hr range in the midwest. That's pushing
> it in the east, too.

For the most part agreed. Depends on the game though. $200/hr. is SOP
for "technical experts" who attach themselves to lawyers chasing big
insurance payouts in liability suits. Did that one too. Wild trip
every engineer needs to try at least once for the sake of acquiring
some "perspective".

>
> 73,
> Chip N1IR

w3rv

1549. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 18:23:35 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411670e9_4@corp.newsgroups.com>
Source record: 91270

Bob Miller wrote:
> Otherwise, places like Home Depot have 500 feet bare 8 guage for $69.

They also have solid or stranded 500' rolls of #16 for
around $15. Why should be radials need heavier wire than
a wire antenna?
--
73, Cecil http://www.qsl.net/w5dxp

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1550. Re: SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:06:43 UTC
From: Aaron Jones <noemail@noemail.com>
Message-ID: <sctch0p98b4s2ibujjb9mc3f1n8764l3v6@4ax.com>
Source record: 91171

"Ralph Mowery" <rmowery28146@earthlink.net> wrote:
> Being a MFJ you
>may need to see if any of the connections are loose. I have one similar to
>that tuner and the first thing I did was open it up and tighten up all the
>loose screws.

And when you get time after tightening the screws, drill out those rivets on the coax connectors and replace them with real bolts and nuts. If they aren't loose yet they will become so, or at least they have on my MFJ tuners. You get pretty much what you pay for with these cheap boxes, but after a little tightening and redoing a solder connection here and there, they become pretty serviceable.

1551. Re: Multiband HF Antenna Nipping | Bottom Up or Top Down?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:10:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9guch0hbbhqaem2k4kloq1qf7befhur4lq@4ax.com>
Source record: 91172

On 7 Aug 2004 07:45:16 -0700, kelly@dvol.com (Brian Kelly) wrote:

>Which wire should I start tuning
>first? I've seen posts which state that one should start nipping from
>the lowest band to the highest band and I've seen recommendations to
>start with the highest band and work down to the lowest band.
>
>Which way is it??

Hi Brian,

Try both ways and work toward the middle.

Nah.

Common advice I've seen is work with the most wire first.

73's
Richard Clark, KB7QHC

1552. Re: EMI Supression Required for Satellite Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:14:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9nuch0tm6bdb80f3942l8e40qi7c0ki05b@4ax.com>
Source record: 91173

On Fri, 06 Aug 2004 21:32:16 +0100, anc <anc@nospam.co.uk> wrote:

>emits strong modulated tones at AM frequencies centered on 1400KHz, even
>when the unit is in standby mode.

Hi OM,

Buy a power line, in-line RF filter. Sounds like you have a very
strong AM station nearby, and it is comming in through the power lead.

73's
Richard Clark, KB7QHC

1553. Re: Multiband HF Antenna Nipping | Bottom Up or Top Down?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:19:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41167df5$1_4@corp.newsgroups.com>
Source record: 91175

Richard Clark wrote:
> Common advice I've seen is work with the most wire first.

Common advice using common sense. An 80m dipole can be close
to resonance on 10m (big effect) but a 10m dipole is completely
non-resonant on 80m (virtually no effect). And a 5% adjustment
to an 80m length equates to a 40% adjustment to a 10m length.
In mathematical terms, tuning the shortest wavelength antenna
first is a *diverging* infinite series, good for sun tans
but bad for ham operating time.
--
73, Cecil http://www.qsl.net/w5dxp

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1554. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:20:45 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <h0vch09ch5p284jo9d62cf7qm4evr0bohk@4ax.com>
Source record: 91174

On Sun, 08 Aug 2004 13:23:35 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Bob Miller wrote:
>> Otherwise, places like Home Depot have 500 feet bare 8 guage for $69.
>
>They also have solid or stranded 500' rolls of #16 for
>around $15. Why should be radials need heavier wire than
>a wire antenna?

I agree -- been looking for bare solid wire to bury -- and all their
500' rolls in the $15 range are insulated and stranded.

bob
k5qwg

1555. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:27:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41167ffd_4@corp.newsgroups.com>
Source record: 91176

Bob Miller wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>They also have solid or stranded 500' rolls of #16 for
>>around $15. Why should be radials need heavier wire than
>>a wire antenna?
>
> I agree -- been looking for bare solid wire to bury -- and all their
> 500' rolls in the $15 range are insulated and stranded.

Lowe's also offers solid #16 wire in four colors and a sharp knife
removes the insulation from a 33' radial in less than a minute. But
what is your objection to insulation for radials? (Ground around here
in East Texas is invariably more inductive than conductive at HF-RF.)
--
73, Cecil http://www.qsl.net/w5dxp

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1556. Re: Halle Berry naked

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:39:22 UTC
From: tomorrowthanyouthink@yahoo.com
Message-ID: <d8f1a7ac.0408081139.3315e022@posting.google.com>
Source record: 91177
Cross-posted to: japan.app.postpet,hannover.fundgrube,alt.military.police,alt.engr.dynamics,rec.radio.amateur.antenna,rec.arts.sf.movies,han.soc.culture.chejudo,es.humanidades.gramatica

wolfofdiamonds@yahoo.com (j j jones) wrote in message
news:<23c378db.0407301337.3837f52d@posting.google.com>...
> tomorrowthanyouthink@yahoo.com (Tamara) wrote in message
news:<d8f1a7ac.0407291409.76d30434@posting.google.com>...
> > "Dr. Daffodil Swain" <wa4jm@earthlink.net> wrote in message
news:<jxLNc.16774$iK.12022@newsread2.news.atl.earthlink.net>...
> > > > Halle Berry naked Halle Berry naked Halle Berry naked Halle Berry naked
> > > >
> > > >
> > > >Who cares.
> > > >
> > > >
> >
> > & she's narcisstic ruining her .all over.andmoreagain.Gimme Dolly Parton.T
>
> she's far more sexy clothed and with an ego reductiion.not for me.JJ

No-thank you.T

1557. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 19:43:43 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <j80dh0hv1hhmiuq5bh4kk2h73epctrekbm@4ax.com>
Source record: 91178

On Sun, 08 Aug 2004 14:27:54 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Bob Miller wrote:
>
>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>>They also have solid or stranded 500' rolls of #16 for
>>>around $15. Why should be radials need heavier wire than
>>>a wire antenna?
>>
>> I agree -- been looking for bare solid wire to bury -- and all their
>> 500' rolls in the $15 range are insulated and stranded.
>
>Lowe's also offers solid #16 wire in four colors and a sharp knife
>removes the insulation from a 33' radial in less than a minute. But
>what is your objection to insulation for radials? (Ground around here
>in East Texas is invariably more inductive than conductive at HF-RF.)

Well, that was a question I posed awhile back -- I'm trying to enhance
a puny ground rod with buried wire (this is a station ground, not an
antenna ground), and figured bare wire would be more "one with the
earth" for such purposes. Would the insulation, or lack of it, make a
difference?

bob
k5qwg

1558. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 20:12:07 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <FBcdtyOXkoFBFAmj@ifwtech.co.uk>
Source record: 91179

Cecil Moore wrote:
>Bob Miller wrote:
>> Otherwise, places like Home Depot have 500 feet bare 8 guage for $69.
>
>They also have solid or stranded 500' rolls of #16 for
>around $15. Why should be radials need heavier wire than
>a wire antenna?

Only for mechanical strength on the ground surface. The current in the antenna equals the total current in all the radials combined, so (I-squared*R) losses in individual radials are very low. For DXpeditions and field day stations where the radial mat only has to last a few days, large amounts of very thin wire give the best results per pound of copper.

I happened to find a large reel of something close to US#16 (18swg) enameled solid copper at a very good price, and that has worked out pretty well - it's easy enough to handle, but pretty hard to break by accident.

For radials, insulation doesn't matter either way from the RF point of view.

However, I wouldn't ever choose bare stranded copper for burial in almost any kind of soil. The RF resistance of corroded stranded wire increases a lot more rapidly than the resistance of solid wire with an equal film of corrosion. (The skin effect forces the RF current to stay on the surface in both cases, but in stranded wire the current also has to hop between strands... or try to.)

Insulated stranded wire, to keep the water out? Well maybe, depending on the kind of ground, the toughness of the insulation, and the kind of price.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1559. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 20:19:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41168c12_5@corp.newsgroups.com>
Source record: 91180

Bob Miller wrote:
> Well, that was a question I posed awhile back -- I'm trying to enhance
> a puny ground rod with buried wire (this is a station ground, not an
> antenna ground), and figured bare wire would be more "one with the
> earth" for such purposes. Would the insulation, or lack of it, make a
> difference?

Sorry Bob, my career was in digital electronics, where if it wasn't
a one or zero, it was broken. For the answer to your question, you
need to consult an analog RF engineer where the exact crossover point
between conductivity and dielectric constant is discussed.

I am personally located in a low conductivity area in East Texas so
I am assuming that the dielectric constant predominates here. If you
are in a very high conductivity area, e.g. Padre Island, TX, all
you need is an electrode in contact with the Gulf of Mexico with no
radials required. If you are in a very low conductivity area, e.g.
Northern New Hampshire, your radials need to be trimmed to a resonant
length whether insulated or not.
--
73, Cecil http://www.qsl.net/w5dxp

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1560. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 20:28:10 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <L%vRc.11378$Yf6.6193@lakeread03>
Source record: 91181

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:j80dh0hv1hhmiuq5bh4kk2h73epctrekbm@4ax.com...
> > Well, that was a question I posed awhile back -- I'm trying to enhance
> a puny ground rod with buried wire (this is a station ground, not an
> antenna ground), and figured bare wire would be more "one with the
> earth" for such purposes. Would the insulation, or lack of it, make a
> difference?
>
> bob
> k5qwg
>

Fpr RF or AC leakage??? It should be bonded to the service entrance
ground rod to start with.

Pete

1561. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 20:44:43 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nnhphF2nh2sU2@uni-berlin.de>
Source record: 91182
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Gareth's Memory" <someone@microsoft.com> wrote in message
news:2nmk96F21s8sU1@uni-berlin.de...
>
> Back to shelf stacking in a supermarket.
>
Are you sure? There's no way I'd walk anywhere near a shelf Airy had
stacked.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1562. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 21:01:07 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nnioaF2nh2sU4@uni-berlin.de>
Source record: 91183
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Starr" <thick.as@plank.net> wrote in message
news:cf5eb0$31r$0@pita.alt.net...
>
>
> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in message
> news:2nl3bbF21i9hU1@uni-berlin.de...
> > "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
> > news:2njlieF1efb1U1@uni-berlin.de...
> > > SWR - Succulent With Ratatouille.
> > >
> > A - Arrogant
> > I - Ignorant
> > R - Rude
> > Y - Yob
> >
> > R - Ridiculous
> >
> > B - Bullshit
> > E - Excrement
> > A - Anal
> > N - Nasty
> >
> > ...(_!_)...
> >
> >
> Beany can be a huge arsehole at times...

That's why he's known as The Anus

... but now you are attacking him on
> inoffensive remarks.
> Not good.
>
Bean is an open target - he has no human rights since he is not human.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1563. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 21:25:52 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-1CF6EE.14255208082004@morgoth.sfu.ca>
Source record: 91184

In article <4116425a$1_8@corp.newsgroups.com>,
Cecil Moore <w5dxp@hotmail.com> wrote:

> David Ryeburn wrote:
> > Put two of them at right angles with coincident feedpoints and tie the
> > long side of one to the short side of the other.
>
> If I understand your description, the result is two balanced
> dipoles arranged in horizontal V's. The low impedance of the
> two long wires at their 1/2WL resonant frequency will keep
> much current from flowing in the shorter wires. It seems
> your idea is just two paralleled dipoles with 90 degrees
> between the dipole elements.

Let's look at it your way and try some numbers. Suppose the original off-center fed wires are each 132 ft long, split 44 ft from one end. (I realize that some recipes use factors slightly different from 1/3.) Your two V-shaped dipoles are 88 ft and 176 ft long, each split in the center. The longer one will have half wave resonance at approximately 2.66 MHz. The shorter one will have half wave resonance at twice that frequency. Higher-order low-Z resonances will occur at frequencies roughly certain integer multiples N of 2.66 MHz. Odd values of N provide resonance for the 176 ft dipole. Values of N which are twice an odd number provide resonance for the 88 ft dipole. These higher-order resonances will not be too near 80/40/20/15 except perhaps for N = 5 (13.3 MHz) near 20 meters. The resonance frequencies calculated this way will be too low since I am using the 468 figure which incorrectly allows for end-effects at voltage maxima inside the wire as well as at the ends. That's why the 13.3 MHz figure worries me a bit. The WARC bands are another matter.

But I don't think looking at it as two dipoles in parallel is the right way to analyze the problem in the first place.

David, ex-W8EZE

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

1564. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago for contract

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 22:17:06 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <CDxRc.223878$a24.185684@attbi_s03>
Source record: 91185

In the Boston area CONSULTANT engineers got paid $1000/day plus expenses
in the early 80s. And they were hired by the day! And they consulted,
which means they did NO engineering work but critiqued, reviewed and
suggested approaches, methods, etc.

Contract engineers, at the 20+ year experience level in a specialty,
were billing at between $80 and $100 per hour. If this is a contract job
the rate is typical.

When I retired from engineering in 2000 my company was billing between
$140/hour and $160/hour for my time.

DD, W1MCE

JLB wrote:

> $65 an hour comes out to $135,200 a year if it was full time.
>
> I would gladly work for half that!
>
> Maybe electrical engineering jobs are growing on trees where you guys are,
> but not here (central Ohio)!
>

1565. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 22:26:28 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <oMxRc.223908$a24.124585@attbi_s03>
Source record: 91186

Buy your own house in a neighborhood without CC&Rs!!!!!

Ken Bessler wrote:

> I moved from Wichita, KS to Aurora, CO (Denver area) a year ago.
>
> In KS I was in a 1 story apartment but had a very ham friendly
> landlord. I had a GAP Titan, a Comet GP-15, a 2m/440 vertical
> and 4 el on 6, 13 el on 2 and 22 el on 440. Things were nice.
>
> Then I moved to Denver. I picked the top floor of a 3 story aptartment
> building, facing away from the mountains (NE corner apt.). I wrapped
> a 153's dipole made from 22 g clear insulated wire around the building
> for HF, put a 6m inverted V in the east window and plonked my MFJ
> "Super High Gain" 2m/440 mag mount on the in the wall A/C unit, which
> was just below the north window. Not a stellar setup but I could hit
> any repeater within 25 miles and I was equal to a 20w mobile on HF.
>
> After a year of no noise, no TVI, no damages, no cops, no parties and
> paying the rent on the 1st every month I finally asked the landlord if
> I could erect antennas on the roof. I explained that I always put up
> antennas in such a way as they could later be removed with *very* little
> if any evidence that they had been there.
>
> He said OK but no higher than 10 feet above the roof and no holes.
>
> I put up a 10 foot mast on a vent pipe mount, holding up a Van Gorden
> 134' "All Bander" antenna but left the other antennas stay put.
>
> Duuuuuuuhhhh....
>
> This morning it hits me - I've got a closet full of coax not being used!
>
> 1st, I moved (as an experiment) the 2m/440 mag mount from indoors
> on the A/C unit to on the roof. I only had to add 4' of coax and on the
> edge of the roof is steel flashing - perfect for the mag mount! Now I'm
> hitting repeaters 65 miles away with 5w that I couldn't hit with 50 before
> and I was recieving at S3-S4 levels. Full scale of course, now.
>
> Then, I got more ideas - I took out my old RS mag mount CB ant (the
> best loaded version they ever made - cost $57 - now cut for 10m) and
> put it on the roof the same way. It's 18' of stock coax reached just fine.
>
> Then came the 6 meter antenna - I grabbed a 50' prefab RS RG58 coax
> piece and went to the roof with tape, knife, zip ties, rope, etc....

>
> 30 minutes later I had secured it as an inverted V to the 10' mast. I had
> to re-tune it - it was cut for 50.2 but in the clear it resonated at 53.1!
> I had to add like 6" of wire to each leg. Man - I thought all the Denver
> area 6m repeaters were offline....NOT! 53.050 is up! Can't wait till
> a band opening to see how this 6m ant works now.
>
> So, I pulled my head out of $%^$^% and used the equipment on hand.
> I now have antennas for 80-6, 11-10, 6, 2 & 70cm all up in the clear
> and that also means no antennas (RF) in the shack. Nice.
>
> I'd put a better coax on the 2m/440 ant but it's only 18.2' long so even
> changing from RG58 to LMR400 probably wouldn't make sense. Heck
> - it figures out to only 1.3db difference @ 460 mhz. Nah - not worth it I
> was planning on spending $200 to put up a Diamond X50 on a 5' mast
> fed with 50' of LMR400 but I don't think so now - I just don't think
> it would make a difference as I'm hitting all the repeaters within 60 miles
> on 5w now. So, that's out.
>
> I do worry about the 68+' of RG58 I'm running to the 6m inverted V.
> Loosing 2.2 db on that run @ 52 mhz. Changing to LMR400DB would
> cut that to 0.6db, gaining 1.6db. Hmmmmm. Maybe. What I need is
> a omnidirectional horizontaly polarized economical gain 6m antenna.
>
> Anybody got ideas? After today's improvements, I want more!
>
> Ken KG0WX
>
>

1566. Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 22:26:43 UTC
From: Jon <jon@portlandbill.co.uk>
Message-ID: <cf69d0glh1@news8.svr.pol.co.uk>
Source record: 91187

Ok here is a question that I should know the answer to but I don't as I have never used a ground mounted vertical.

Please can someone tell me if it is ok to use plastic insulated wire for ground radials?

Thanks

Jon G2FHF

1567. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 22:32:41 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <6SxRc.717$vn3.602@fe39.usenetserver.com>
Source record: 91188

Go to a farm supply store and look at their aluminum electric fence wire.

They will also have steel electric fence wire which will be cheaper, but it
will not last as lone.

--
Jim
N8EE

to email directly, send to my call sign at arrl dot net
"W8LU" <w8lu@semdxa.org> wrote in message
news:b2gch0h1rnrrkaq13cmmq68vc17dfauf1l@4ax.com...
> I'm looking for a source of radial wire. Possibly I can order over
> the internet. Do you have any suggestions?
> Tnx es 73 de Ken, W8LU

1568. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 22:59:35 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <rfyRc.7978$nx2.6489@newsread2.news.atl.earthlink.net>
Source record: 91189

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040804190647.04176.00001859@mb-m26.aol.com...
> >It was a simple, basic question. I gave him the simple, basic, answer.
>
> Well, the original poster did not give height, feedpoint position, ground
> conditions, surrounding objects ect..
> I also think the answer to the radiation angle question should be in
degrees
> above the horizon. If he asked about the radiation pattern of the delta
loop,
> the broadside or end fire characteristics would be a proper response.
> My answer (for what it is worth) to the orginal question is : "it
depends".
> K9SQG has my vote.
>
>
> 73 Gary N4AST

Excuse me Gary. I don't bother with a computer (GIGO) program to teach me
what I learned by experience.

Dan/W4NTI

1569. Re: New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 23:39:04 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408081539.5c388e1c@posting.google.com>
Source record: 91190

Mike Coslo <mcoslo@adelphia.net> wrote in message
news:<4oGdnWNUFYVAD4jcRVn-uQ@adelphia.com>...
> Brian Kelly wrote:
>
> > Mike Coslo <mjc5remove@psu.edu> wrote in message news:<4113ABB7.7070300@psu.edu>...
> >
> >>Last night I put up my new home-brew Off Center Fed antenna.
> >>
> >> It's around 50 feet up, 135 feet in total length. There is a small
> >>section, ~30 feet that hangs down from the long end, due to lack of
> >>distance between trees.
> >>
> >> Initial SWR readings are acceptable on all bands, but I'll be doing
> >>some trimming to see if I can't nudge them down a little more.
> >>
> >> I haven't transmitted yet, save for some low power checks on each band,
> >>and a 100 watt power check on the band with the worst SWR to see that
> >>the PA amp didn't fold back. All fine there.
> >
> >
> > Then stop right there before you screw it up.
>
> HA! Too late! Well, I didn't really screw it up, but I did do a little
> experiment to see which way I was going on the SWR since I made the
> antenna a littel longer than calculated. Sure enough, the SWR got worse
> when I added a bit onto the end. But now I'll have to wit until tomorrow
> to remove it. But you're so right.

Heh. Been there, learned the hard way when to leave well enough alone.
If you intend to keep on with antenna experiments you ought to
consider buying one of the antenna anylyzers. They really make quick
work of the sorts of things you're doing Mike. There are some bucks
involved but I've saved *hours* of drudgery with my MFJ 259B analyzer.
No need to put any TX power into the antenna just to tickle the SWR
bridge, it does it's own tickling. With batteries in the analyzer you
can do it all in the yard and not have to run back & forth to the
shack.

> >>My question is, is there any good trick to the end with the "hangy down
> >>part"?
> >
> >
> > No.
> >
> >

> >> Initially, I have run the wire thorough the insulator, and Ty-wrapped
> >>the outgoing wire to the incoming one, then let it drop. Or should I run
> >>the wire to the insulator in the normal way, then attach the tail with
> >>solder? I'd prefer to keep the wire in one piece if possible.
> >
> >
> > None of it makes any difference electrically. If the element conducts
> > any which way you build the "tail" and solder it yer done. The rest of
> > it involves common sense mechanical integrity/reliability sorts of
> > considerations.
>
>
> Excellent. I figured as much but wasn't sore.

Good luck with it.

> - Mike KB3EIA -

w3rv

1570. Re: WTB Antenna Base

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-08 23:56:01 UTC
From: Yodar <yodar@cfl.rr.com>
Message-ID: <l4zRc.38153$DZ.5059447@twister.tampabay.rr.com>
Source record: 91191

Pete Smith wrote:
> Hello
> Looking for an antenna base AB-1241 /PRC-104 ..If you have one for sale
> please send me a msg with price .. Thank you Pete k7ztm
>
GO TO FAIRRADIO.COM they have military antenna bases that possibly
could be adapted to your needs

Yodar

1571. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 00:16:26 UTC
From: fractenna@aol.com
Message-ID: <20040808201626.11752.00002944@mb-m11.aol.com>
Source record: 91192

>When I retired from engineering in 2000 my company was billing between
>$140/hour and $160/hour for my time.
>
>DD, W1MCE

Welcome to 2004.

1572. Re: Being confused with two designs of Collinear Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 00:19:44 UTC
From: fractenna@aol.com
Message-ID: <20040808201944.11752.00002946@mb-m11.aol.com>
Source record: 91193

>Very sincerely,
>Farzad
>

Hi Farzad,

Curious to know the interest in Iran for colinears. Can you tell us about the application? Might make it easier to see if and how one might help.

73,
Chip N1IR

1573. Re: New OCF Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 00:30:44 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <-vCdndOfOblpWIvcRVn-gg@adelphia.com>
Source record: 91194

Brian Kelly wrote:

> Mike Coslo <mcoslo@adelphia.net> wrote in message
news:<4oGdnWNUFYVAD4jcRVn-uQ@adelphia.com>...
>
>>Brian Kelly wrote:
>>
>>
>>>Mike Coslo <mjc5remove@psu.edu> wrote in message news:<4113ABB7.7070300@psu.edu>...
>>>
>>>
>>>>Last night I put up my new home-brew Off Center Fed antenna.
>>>>
>>>> It's around 50 feet up, 135 feet in total length. There is a small
>>>>section, ~30 feet that hangs down from the long end, due to lack of
>>>>distance between trees.
>>>>
>>>> Initial SWR readings are acceptable on all bands, but I'll be doing
>>>>some trimming to see if I can't nudge them down a little more.
>>>>
>>>> I haven't transmitted yet, save for some low power checks on each band,
>>>>and a 100 watt power check on the band with the worst SWR to see that
>>>>the PA amp didn't fold back. All fine there.
>>>
>>>
>>>Then stop right there before you screw it up.
>>
>> HA! Too late! Well, I didn't really screw it up, but I did do a little
>>experiment to see which way I was going on the SWR since I made the
>>antenna a littel longer than calculated. Sure enough, the SWR got worse
>>when I added a bit onto the end. But now I'll have to wit until tomorrow
>>to remove it. But you're so right.
>
>
> Heh. Been there, learned the hard way when to leave well enough alone.
> If you intend to keep on with antenna experiments you ought to
> consider buying one of the antenna anylyzers. They really make quick
> work of the sorts of things you're doing Mike. There are some bucks
> involved but I've saved *hours* of drudgery with my MFJ 259B analyzer.
> No need to put any TX power into the antenna just to tickle the SWR
> bridge, it does it's own tickling. With batteries in the analyzer you
> can do it all in the yard and not have to run back & forth to the
> shack.

I think I will. I just noted a big difference between my Outboard S-Meter and my rig's. The lower levels correlate just fine, but at higher SWR's they diverge in a big way.

- Mike KB3EIA -

1574. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 01:08:24 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <c8ARc.270261$Oq2.67790@attbi_s52>
Source record: 91195

<grin> Chip, my retirement income is SIGNIFICANTLY less than my active
billing rate <grin>

DD, W1MCE

Fractenna wrote:
>>When I retired from engineering in 2000 my company was billing between
>>$140/hour and $160/hour for my time.
>>
>>DD, W1MCE
>
>
> Welcome to 2004.

1575. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 01:09:35 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <j9ARc.271596$XM6.45253@attbi_s53>
Source record: 91196

YEP!

Jon wrote:

> Ok here is a question that I should know the answer to but I don't as I have
> never used a ground mounted vertical.
>
> Please can someone tell me if it is ok to use plastic insulated wire for
> ground radials?
>
> Thanks
>
> Jon G2FHF
>
>

1576. Re: Neeed EE w/ MIMO and phased array antenna expertise in Chicago

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 01:12:30 UTC
From: fractenna@aol.com
Message-ID: <20040808211230.04158.00002667@mb-m15.aol.com>
Source record: 91197

><grin> Chip, my retirement income is SIGNIFICANTLY less than my active
>billing rate <grin>
>
>DD, W1MCE

I suspect that the former monetary payoffs don't match the satisfaction you get these days from your new profession:-)

Hope to see you at Boxboro!

73,
Chip N1IR

1577. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 01:13:48 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cf6j4crqn1@hercules.btinternet.com>
Source record: 91198

Choose copper radial wire for its mechanical strength in the ground. 18 to 14 gauge is OK in fine, not rocky soil. Bus-bars and plates are a waste of copper.

Thin insulation makes no practical electrical difference at HF. In theory, the thickness of insulation actually reduces resistance-to-ground loss because the insulation replaces the lossy soil with a lossless capacitance. The effective diameter of the copper is increased by the insulation thickness.

If you take matters to the exteme and have elevated radials the ground loss is obviously minimised. You can get away with only 3 or 4 elevated radials.

Enamelled magnet wire will be easier to obtain and possibly cheaper than the bare stuff. Get it cheap in relatively short lengths from electric-motor and transformer re-wind plants. They often have scrap lengths on reels and may be glad to get rid of it.

Enamelled wire is also a protection against corrosion and so improves durability.

A single ground rod is equivalent to a single radial of slightly greater than the same length and is practically useless.

Reg, G4FGQ.

1578. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 01:41:49 UTC
From: Mark <mark@nospam.com>
Message-ID: <4116D65B.528D69AC@nospam.com>
Source record: 91199

hi dave,

good advice but sometimes not possible !

The ccr topic was covered at length on http://www.eham.net
in antenna restrictions forum.

Just about all new construction here in the RDU NC area is CCR !

The banks won't lend the money to the developers unless they have ccr.

On the other hand, if you travel out of the area and into the country you
may find property to build on but at the cost of a long commute.

Another ham did research on land value with and without ccr, and guess
what ? The real estate without CCR appreciated more then the land with ccr.

73 mark

Dave wrote:

> Buy your own house in a neighborhood without CC&Rs!!!!!
>
> Ken Bessler wrote:
>
> > I moved from Wichita, KS to Aurora, CO (Denver area) a year ago.
> >
> > In KS I was in a 1 story apartment but had a very ham friendly
> > landlord. I had a GAP Titan, a Comet GP-15, a 2m/440 vertical
> > and 4 el on 6, 13 el on 2 and 22 el on 440. Things were nice.
> >
> > Then I moved to Denver. I picked the top floor of a 3 story aptartment
> > building, facing away from the mountains (NE corner apt.). I wrapped
> > a 153's dipole made from 22 g clear insulated wire around the building
> > for HF, put a 6m inverted V in the east window and plonked my MFJ
> > "Super High Gain" 2m/440 mag mount on the in the wall A/C unit, which
> > was just below the north window. Not a stellar setup but I could hit
> > any repeater within 25 miles and I was equal to a 20w mobile on HF.
> >
> > After a year of no noise, no TVI, no damages, no cops, no parties and
> > paying the rent on the 1st every month I finally asked the landlord if
> > I could erect antennas on the roof. I explained that I always put up
> > antennas in such a way as they could later be removed with *very* little
> > if any evidence that they had been there.
> >
> > He said OK but no higher than 10 feet above the roof and no holes.
> >

> > I put up a 10 foot mast on a vent pipe mount, holding up a Van Gorden
> > 134' "All Bander" antenna but left the other antennas stay put.
> >
> > Duuuuuuuhhhh....
> >
> > This morning it hits me - I've got a closet full of coax not being used!
> >
> > 1st, I moved (as an experiment) the 2m/440 mag mount from indoors
> > on the A/C unit to on the roof. I only had to add 4' of coax and on the
> > edge of the roof is steel flashing - perfect for the mag mount! Now I'm
> > hitting repeaters 65 miles away with 5w that I couldn't hit with 50 before
> > and I was recieving at S3-S4 levels. Full scale of course, now.
> >
> > Then, I got more ideas - I took out my old RS mag mount CB ant (the
> > best loaded version they ever made - cost $57 - now cut for 10m) and
> > put it on the roof the same way. It's 18' of stock coax reached just fine.
> >
> > Then came the 6 meter antenna - I grabbed a 50' prefab RS RG58 coax
> > piece and went to the roof with tape, knife, zip ties, rope, etc....
> >
> > 30 minutes later I had secured it as an inverted V to the 10' mast. I had
> > to re-tune it - it was cut for 50.2 but in the clear it resonated at 53.1!
> > I had to add like 6" of wire to each leg. Man - I thought all the Denver
> > area 6m repeaters were offline....NOT! 53.050 is up! Can't wait till
> > a band opening to see how this 6m ant works now.
> >
> > So, I pulled my head out of $%^$^% and used the equipment on hand.
> > I now have antennas for 80-6, 11-10, 6, 2 & 70cm all up in the clear
> > and that also means no antennas (RF) in the shack. Nice.
> >
> > I'd put a better coax on the 2m/440 ant but it's only 18.2' long so even
> > changing from RG58 to LMR400 probably wouldn't make sense. Heck
> > - it figures out to only 1.3db difference @ 460 mhz. Nah - not worth it I
> > was planning on spending $200 to put up a Diamond X50 on a 5' mast
> > fed with 50' of LMR400 but I don't think so now - I just don't think
> > it would make a difference as I'm hitting all the repeaters within 60 miles
> > on 5w now. So, that's out.
> >
> > I do worry about the 68+' of RG58 I'm running to the 6m inverted V.
> > Loosing 2.2 db on that run @ 52 mhz. Changing to LMR400DB would
> > cut that to 0.6db, gaining 1.6db. Hmmmmm. Maybe. What I need is
> > a omnidirectional horizontaly polarized economical gain 6m antenna.
> >
> > Anybody got ideas? After today's improvements, I want more!
> >
> > Ken KG0WX
> >
> >

1579. Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 02:53:39 UTC
From: radio-operator@telus.net
Message-ID: <d318809e.0408081853.5e06781a@posting.google.com>
Source record: 91200
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Hello,

I am looking for some advice on if the ground system featured below is
sufficent or should be upgraded. It consists of:

- 3 ground rods 10' each around the tower (bonded together)
- 2 ground plates (one outside, one in the shack, also bonded
together)
- lightning arrestors and/or feedthrough adapters
- tower to mast ground
- interior coax switch (not shown)

I provided some pictures below:

http://www.telusplanet.net/~homac/exteriorground01.JPG

http://www.telusplanet.net/~homac/exteriorground02.JPG

http://www.telusplanet.net/~homac/exteriorground02a.JPG

http://www.telusplanet.net/~homac/exteriorground03.JPG

http://www.telusplanet.net/~homac/exteriorground04.JPG

http://www.telusplanet.net/~homac/interiorground01.JPG

http://www.telusplanet.net/~homac/interiorground02.JPG

I am looking for constructive feedback.....

Thank-you....

Lloyd

1580. Q R S song - new!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 03:26:15 UTC
From: k3pi@arrl.net
Message-ID: <53da5b99.0408081926.50323ac2@posting.google.com>
Source record: 91201

Take a listen to the new radio song . . . Q R S by Hindsight...written
and performed by radio guys.

Visit http://www.radiointel.com

Click on the Q R S logo on left side of home page.
This takes you to the Hindsight page, scroll down and click on Q R S
logo for the player. You can pull up lyrics also.

Feedback very welcome & appreciated...here or to
hindsight@radiointel.com

Thank you

73 Russ K3Pi
radiointel & hindsight

1581. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 04:02:17 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <dHCRc.11416$Yf6.1125@lakeread03>
Source record: 91202
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Lloyd wrote

> - 3 ground rods 10' each around the tower (bonded together)
> - 2 ground plates (one outside, one in the shack, also bonded
> together)
> - lightning arrestors and/or feedthrough adapters
> - tower to mast ground
> - interior coax switch (not shown)
>
> I provided some pictures below:
>
> I am looking for constructive feedback.....

Hi Lloyd. Certainly an extremely professional appearance to the work. Great to see such attention to detail as your station provides. Feedback now.....

Is that nice drainage-rock surrounding the tower base only a couple inches deep? Seems the ground rods lose effectiveness for whatever depth that rock is. Would have been fine to sink them a full 10' even after digging a 1' deep trench and covering with topsoil. Besides gaining addtional effectiveness from the ground, it's the exposure to air that will cause the most need for future ground system maintenance.

Ground rods around the tower are very close together, is there room to add additional ground rods from at least two of the legs at a distance of 10-20' from the tower?

Tower is very close to, but not bonded to the house. Are there metal rain gutters or metal flashing close by? Bonding to them is indicated, if so.

Is that a picture of coax shield grounding design, using the SS hose clamps? Stainless steel is a very poor conductor and works when nothing else will - but a copper or bronze shield-ground would be better. Andrews Wire and I.C.E both make nice ones.

Interior surge protection for wiring is going to be a serious issue, when a tower is that close to the structure. EMI from a direct attachment so close will be a challenge that might indicate 200% sizing of neutral wiring, double-ended surge protection and some very good bonding. Ground Potential Rise will start right at your station's single point ground with a tower so close - therefore perfect bonding including the connection to the AC service ground is essential. In that respect, those attractive looking insulated wires bonding the station equipment to the single point ground may be inadequate. The bonding is the only protection from such close aboard GPR, and individual heavy, wide copper straps could do a much better job than the

wiring shown.

All in all, I think the only major defect is the lack of additional ground rods, as when a tower is right next to you, the desired direction for attachment current is away, away, away. Carry it away with a ground field that uses very heavy low impedance conductors and at least two more ground rods. More is better considering where your tower is.

Best regards,

Jack Painter
Virginia Beach VA

1582. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 04:19:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cf6u06$7qn$1@hercules.btinternet.com>
Source record: 91204

> All you've done is insert a lossless capacitance in series with the
> lossy soil, right? Still the same loss, isn't it? Perhaps that's what
> you meant.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>
==========
We have REPLACED lossy soil with lossless insulation.

But now there's no lossy soil in contact with the wire and most of the loss occurs in that layer of soil directly in contact with it. Given the wire diameter and diameter over the insulation the improvement can be calculated.

Make the wire insulation 6 feet thick and see what happens. You have something like very low ground loss elevated radials.

Reg, G4FGQ

1583. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 04:28:09 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <4116FD59.8070206@nettally.com>
Source record: 91203
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Looks like a pretty good start. I would add a Polyphaser rotator surge protector to those conductors passing through the terminal block on the ground plate.

Make sure everything in your shack is bonded together, including your computer etc. Add protection to phone lines. etc.

The other poster mentioned more ground rods. That is a good idea, arrange them to direct the current away from your shack.

Have you bonded this ground system to the rest of the house? If not, do so by running a conducter to the utility ground rod. Be careful doing so as there may be a slight potential difference that will go away when bonded. Also check your water supply. Is it mettalic? Then bond it as well.

Private wrote:

>Hello,
>
>I am looking for some advice on if the ground system featured below is
>sufficent or should be upgraded. It consists of:
>
>- 3 ground rods 10' each around the tower (bonded together)
>- 2 ground plates (one outside, one in the shack, also bonded
>together)
>- lightning arrestors and/or feedthrough adapters
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>
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>
>http://www.telusplanet.net/~homac/exteriorground02a.JPG
>
>http://www.telusplanet.net/~homac/exteriorground03.JPG
>
>http://www.telusplanet.net/~homac/exteriorground04.JPG
>
>http://www.telusplanet.net/~homac/interiorground01.JPG
>
>http://www.telusplanet.net/~homac/interiorground02.JPG
>

>I am looking for constructive feedback.....
>
>Thank-you....
>
>Lloyd
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"

"Jazz is not dead, It just smells funny" F.Z

1584. Re: Antenna feed wire question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 05:06:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41170798$1_7@corp.newsgroups.com>
Source record: 91205

David Ryeburn wrote:
> But I don't think looking at it as two dipoles in parallel is the right
> way to analyze the problem in the first place.

The RF will take the path of least impedance. The currents
will equalize in the long legs. The currents will equalize
in the short legs. One of those currents will invariably
be higher than the other one, i.e. the current will be
higher either in the long legs or the short legs depending
upon frequency.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1585. Re: Q R S song - new!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 05:31:23 UTC
From: 9V1GO <rmread@starhub.net.sg>
Message-ID: <41170c2d@news.starhub.net.sg>
Source record: 91206

>
> Feedback very welcome & appreciated...here or to
> hindsight@radiointel.com
>
Good site, some really funny bits on the links, I enjoyed the browse.

73

Bob 9V1GO

1586. Hustler Antenna Masts wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 06:39:23 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <10he7513be1bmfd@corp.supernews.com>
Source record: 91207

I've found one person with a take down mast and I'd still like to find at least one or two more. These are the masts for the old Hustler resonators. I'm NOT looking to buy NEW masts unless I have to.. I'm just hoping someone has an old mast laying around they'd like to sell.

kl0an
Paul Jordan
Anchorage, AK

1587. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 07:51:00 UTC
From: Glenn LeBrasseur <spamthis@127.0.0.1>
Message-ID: <U1GRc.184$Ei5.14172@news.uswest.net>
Source record: 91208

| What I need is
| a omnidirectional horizontaly polarized economical gain 6 m antenna.
| Anybody got ideas?

How about a Turnstile? Even a 6M Turnstile-Reflector should fit inside
your 10 foot envelope, but you may not want/need the overhead propagation.

Glenn KJ7SU

Dave Shrader wrote:
> Buy your own house in a neighborhood without CC&Rs!!!!!
>
> Ken Bessler wrote:
>
>> I moved from Wichita, KS to Aurora, CO (Denver area) a year ago.
>>
>> In KS I was in a 1 story apartment but had a very ham friendly
>> landlord. I had a GAP Titan, a Comet GP-15, a 2m/440 vertical
>> and 4 el on 6, 13 el on 2 and 22 el on 440. Things were nice.
>>
>> Then I moved to Denver. I picked the top floor of a 3 story aptartment
>> building, facing away from the mountains (NE corner apt.). I wrapped
>> a 153's dipole made from 22 g clear insulated wire around the building
>> for HF, put a 6m inverted V in the east window and plonked my MFJ
>> "Super High Gain" 2m/440 mag mount on the in the wall A/C unit, which
>> was just below the north window. Not a stellar setup but I could hit
>> any repeater within 25 miles and I was equal to a 20w mobile on HF.
>>
>> After a year of no noise, no TVI, no damages, no cops, no parties and
>> paying the rent on the 1st every month I finally asked the landlord if
>> I could erect antennas on the roof. I explained that I always put up
>> antennas in such a way as they could later be removed with *very* little
>> if any evidence that they had been there.
>>
>> He said OK but no higher than 10 feet above the roof and no holes.
>>
>> I put up a 10 foot mast on a vent pipe mount, holding up a Van Gorden
>> 134' "All Bander" antenna but left the other antennas stay put.
>>
>> Duuuuuuuhhhh....
>>
>> This morning it hits me - I've got a closet full of coax not being used!
>>
>> 1st, I moved (as an experiment) the 2m/440 mag mount from indoors
>> on the A/C unit to on the roof. I only had to add 4' of coax and on the

>> edge of the roof is steel flashing - perfect for the mag mount! Now I'm
>> hitting repeaters 65 miles away with 5w that I couldn't hit with 50
>> before
>> and I was recieving at S3-S4 levels. Full scale of course, now.
>>
>> Then, I got more ideas - I took out my old RS mag mount CB ant (the
>> best loaded version they ever made - cost $57 - now cut for 10m) and
>> put it on the roof the same way. It's 18' of stock coax reached just
>> fine.
>>
>> Then came the 6 meter antenna - I grabbed a 50' prefab RS RG58 coax
>> piece and went to the roof with tape, knife, zip ties, rope, etc....
>>
>> 30 minutes later I had secured it as an inverted V to the 10' mast. I had
>> to re-tune it - it was cut for 50.2 but in the clear it resonated at
>> 53.1!
>> I had to add like 6" of wire to each leg. Man - I thought all the Denver
>> area 6m repeaters were offline....NOT! 53.050 is up! Can't wait till
>> a band opening to see how this 6m ant works now.
>>
>> So, I pulled my head out of $%^$^% and used the equipment on hand.
>> I now have antennas for 80-6, 11-10, 6, 2 & 70cm all up in the clear
>> and that also means no antennas (RF) in the shack. Nice.
>>
>> I'd put a better coax on the 2m/440 ant but it's only 18.2' long so even
>> changing from RG58 to LMR400 probably wouldn't make sense. Heck
>> - it figures out to only 1.3db difference @ 460 mhz. Nah - not worth it I
>> was planning on spending $200 to put up a Diamond X50 on a 5' mast
>> fed with 50' of LMR400 but I don't think so now - I just don't think
>> it would make a difference as I'm hitting all the repeaters within 60
>> miles
>> on 5w now. So, that's out.
>>
>> I do worry about the 68+' of RG58 I'm running to the 6m inverted V.
>> Loosing 2.2 db on that run @ 52 mhz. Changing to LMR400DB would
>> cut that to 0.6db, gaining 1.6db. Hmmmmm. Maybe. What I need is
>> a omnidirectional horizontaly polarized economical gain 6m antenna.
>>
>> Anybody got ideas? After today's improvements, I want more!
>>
>> Ken KG0WX
>>
>>
>

1588. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 10:10:29 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2np12rF34nu0U2@uni-berlin.de>
Source record: 91209

A Halo?

Popular for 2M mobile until the CBisation with
vertically-polarised and channelised FM came along.

"Glenn LeBrasseur" <spamthis@127.0.0.1> wrote in message
news:U1GRc.184$Ei5.14172@news.uswest.net...
> | What I need is
> | a omnidirectional horizontaly polarized economical gain 6 m antenna.
> | Anybody got ideas?

1589. Re: Saddam Hussein Found hanging in Jail Cell

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 10:25:20 UTC
From: Steve <lafayetteradio3@optonline.net>
Message-ID: <411751D5.A8B0644B@optonline.net>
Source record: 91210
Cross-posted to: rec.ponds,rec.puzzles,rec.puzzles.crosswords,rec.pyrotechnics,rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors

HERE WE GO AGAIN WITH THIS VIRUS CRAP.
IT SHOULD READ:
SENDER OF FALSE CRAP WITH VIRUS ATTACHED FOUND HANGING
AT HOME BY INTERNET USERS!!

davidreid@gmail.com wrote:

> Early this morning Saddam Hussein was found to have commited suicide. The guards who check on him at regular 30 minute intervals found a suicide note at the scene which can be downloaded and read here.
>
> Name: SaddamFoundHanged.zip
> SaddamFoundHanged.zip Type: Zip Compressed Data (application/x-zip-compressed)
> Encoding: x-uuencode

1590. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 13:24:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cf7tul$d31$1@hercules.btinternet.com>
Source record: 91211

"Bill Turner" <noway@nohow.com> wrote in message
news:b3seh0t5tudmj6e8jeqc7afi4g9v37pmga@4ax.com...
> On Mon, 9 Aug 2004 04:19:18 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >We have REPLACED lossy soil with lossless insulation.
> >
> >But now there's no lossy soil in contact with the wire and most of the
loss
> >occurs in that layer of soil directly in contact with it. Given the wire
> >diameter and diameter over the insulation the improvement can be
calculated.
> >
> >Make the wire insulation 6 feet thick and see what happens. You have
> >something like very low ground loss elevated radials.
> >---
> >Reg, G4FGQ
>
> ----------
>
> Are we talking about buried or elevated radials? I had assumed buried
> since elevated radials would have no contact with the soil at all.
>
> As I see it, with buried radials the RF must still penetrate the earth
> to get to the radials, so whether there is insulation or not, the earth
> loss would still be there. Am I wrong?
>
> --
> Bill, W6WRT
> QSLs via LoTW
>
==========

Yes Bill, in my opinion your argument is wrong. But we could go on for ever
like this.

Reg.

1591. "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 14:48:14 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2npha4F21tagU1@uni-berlin.de>
Source record: 91212
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Anybody know anything about the internal configuration
of these?

I bought one on behalf of my friend yesterday at Wimborne
to replace the 5/8ths one (not a colinear - misunderstanding)
that had been badly manufactured (q.v.)

On this Diamond, it gives an SWR of 1.01:1 and yet a DC test
shows no continuity between the centre of the coax and the
vertical radiator - the outer of the coax shows a dead short
to the monopole.

How are these things wired internally? - Mystified

1592. Re: moxon vs quad

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 14:59:11 UTC
From: KAZeringue <kazeringue@aol.com>
Message-ID: <3jMRc.166484$wH4.10331438@twister.southeast.rr.com>
Source record: 91213

I've compared those two on 2 meters. Both antennas were homebrewed based on W4RNLs' info on his web page.

The moxon has deeper side nulls, but they are at different angles than those of the quad. The front-to-side nulls on the quad are pretty much at 90 degrees, while the moxon's nulls were more close to 120 degrees. I can't quantify it beyond S-meter readings on my VX-5R, but the moxon nulls were deeper by 2 or 3 S units on this particular VX-5R. Your mileage may vary.

Directly to the rear, the two antennas were about the same.

I couldn't determine any gain differences, nor measure a 3db beamwidth, but the beamwidths were similar for horizontal polarization, to about 60 degrees either side of straight ahead. Then the yagi started dropping off. The moxon dropped off more slowly until well past 90 degrees.

Vertical polarization is different, but you probably are not planning on that for 20 meters. Vertically polarized, the moxon had a nice deep null directly to the rear, while the pattern on the quad was more or less unchanged from its pattern horizontally polarized. The moxon's vertical beamwith was also quite broad.

In sort, what I saw playing around with the antenna's was very similar to Cebik's modeling predictions.

All of my tinkering was done listening to local repeaters, with the antennas at about 15 feet height.

For 20 meters, it will probably be a matter of which is easiest to build and support. A monoband loaded yagi might be easier to homebrew for 20 meters.

73,
Keith, W4KAZ

1593. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 15:14:09 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2npim3F33q2mU1@uni-berlin.de>
Source record: 91214
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2npha4F21tagU1@uni-berlin.de...
> Anybody know anything about the internal configuration
> of these?
>
> I bought one on behalf of my friend yesterday at Wimborne
> to replace the 5/8ths one (not a colinear - misunderstanding)
> that had been badly manufactured (q.v.)
>

It had to come. Shoddy Workmanship. You thrown it in the bin I assume, on
the basis no reputable company has a returns policy.

1594. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 15:14:51 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2npincF37s2jU1@uni-berlin.de>
Source record: 91215
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2npha4F21tagU1@uni-berlin.de...
> Anybody know anything about the internal configuration
> of these?
>
> I bought one on behalf of my friend yesterday at Wimborne
> to replace the 5/8ths one (not a colinear - misunderstanding)
> that had been badly manufactured (q.v.)
>

Why didn't you make one? Cheque Book Ham are you?

1595. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 15:17:32 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2npisdF39polU1@uni-berlin.de>
Source record: 91216
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2npha4F21tagU1@uni-berlin.de...
> Anybody know anything about the internal configuration
> of these?
>
> I bought one on behalf of my friend yesterday at Wimborne
> to replace the 5/8ths one (not a colinear - misunderstanding)
> that had been badly manufactured (q.v.)
>
> On this Diamond, it gives an SWR of 1.01:1 and yet a DC test
> shows no continuity between the centre of the coax and the
> vertical radiator - the outer of the coax shows a dead short
> to the monopole.
>
> How are these things wired internally? - Mystified

Why, it isn't complicated. There is a matching network, details depends on
the version you have. Some have a tapped parallel tuned circuit, some a coil
tapped with a C to the monopole.

So much for our resident expert.....

1596. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 16:17:16 UTC
From: Gordon Hudson <gordon@usenet.hostroute.co.uk>
Message-ID: <4117a38d$0$58820$5a6aecb4@news.aaisp.net.uk>
Source record: 91217
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Gareth's Memory" <someone@microsoft.com> wrote in message
news:2npincF37s2jU1@uni-berlin.de...
>
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:2npha4F21tagU1@uni-berlin.de...
> > Anybody know anything about the internal configuration
> > of these?
> >
> > I bought one on behalf of my friend yesterday at Wimborne
> > to replace the 5/8ths one (not a colinear - misunderstanding)
> > that had been badly manufactured (q.v.)

I had one of those Diamond ones.Couldn't make it work.
Used the Aluminium for something else.
(if its the 5/8 over 5/8 you are taling about).

1597. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 16:18:38 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2npmk4F3d337U1@uni-berlin.de>
Source record: 91218
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

It quite possibly is - both halves of the monopole
are just that bit longer than arm's length.

Yes - I've done that before - last year during a lull in
interest I used the aluminium elements of an HF beam
kit to make up the legs for the testing horse for
my clocks, on the basis that the cheapest thing that
you can buy is always more expensive than the most valuable
thing in your junk box!

"Gordon Hudson" <gordon@usenet.hostroute.co.uk> wrote in message
news:4117a38d$0$58820$5a6aecb4@news.aaisp.net.uk...
> > "Airy R. Bean" <me@privacy.net> wrote in message
> > news:2npha4F21tagU1@uni-berlin.de...
> > > Anybody know anything about the internal configuration
> > > of these?
> > > I bought one on behalf of my friend yesterday at Wimborne
> > > to replace the 5/8ths one (not a colinear - misunderstanding)
> > > that had been badly manufactured (q.v.)
> I had one of those Diamond ones.Couldn't make it work.
> Used the Aluminium for something else.
> (if its the 5/8 over 5/8 you are taling about).

1598. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 17:30:02 UTC
From: Starr <thick.as@plank.net>
Message-ID: <cf8car$mo0$0@pita.alt.net>
Source record: 91219
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

Frank Turner-Smith G3VKI wrote:
> "Starr" <thick.as@plank.net> wrote in message
> news:cf5eb0$31r$0@pita.alt.net...
>>
>>
>> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in
>> message news:2nl3bbF21i9hU1@uni-berlin.de...
>>> "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
>>> news:2njlieF1efb1U1@uni-berlin.de...
>>>> SWR - Succulent With Ratatouille.
>>>>
>>> A - Arrogant
>>> I - Ignorant
>>> R - Rude
>>> Y - Yob
>>>
>>> R - Ridiculous
>>>
>>> B - Bullshit
>>> E - Excrement
>>> A - Anal
>>> N - Nasty
>>>
>>> ...(_!_)...
>>>
>>>
>> Beany can be a huge arsehole at times...
>
> That's why he's known as The Anus
>
> ... but now you are attacking him on
>> inoffensive remarks.
>> Not good.
>>
> Bean is an open target - he has no human rights since he is not human.

Oh i'm not worried about him, I'm worried for you. It's starting to become
an obession. Just ignore the tosser.

--
S
--
I live my life like I play games, I cheat.
-

Trolls are your enemies, wipe them out.
http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
-

1599. Re: Sometimes a light bulb just goes "on".... duuuuuuhhhhh

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 18:01:44 UTC
From: dplatt@radagast.org
Message-ID: <10hff08st3vga48@corp.supernews.com>
Source record: 91220

> What I need is
> a omnidirectional horizontaly polarized economical gain 6 m antenna.
> Anybody got ideas?

In a fairly old (1970's-era) copy of the ARRL VHF book I picked up recently at a swapmeet for a dollar, I found plans for a horizontal omni design called the "big wheel". If I recall correctly, it consists of three full-wavelength horizontal loops, fed from a common central feedpoint, with each loop (bent slightly out of circular form) forming a 120-degree segment of a wheel-shaped structure. They're fed in parallel, with an inductive hairpin strap for matching.

The "big wheel" is said to give significant gain over a bent-half-wavelength-dipole "halo" antenna, and I believe it has gain in excess of that of a turnstile. Two halos can be stacked quite effectively - the book said that the improvement in useful gain is often more than might normally be expected from stacking, apparently because a stacked pair often has a main radiation-angle lobe at a lower angle than a single wheel.

Sure looks economical - you could build one out of stiff copper wire, or aluminum or copper tubing, plus some homemade clamps and the matching strap.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1600. PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 20:16:12 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0408091216.911d128@posting.google.com>
Source record: 91121

Good Evening,

I'd like some advice on building the phasing harness
required for the following antenna:

http://members.tripod.com/~AMN92/cp_ant.htm

It certainly would use 75 ohm RG-6, and i
believe it would be 1 full wavelength, fed in the
center, with the two bays on either end (1/2 wave
to each antenna). You would also need 4 turns of
3-4" diameter coils in the RG-6 at the feedpoints,
to serve as baluns, which decouples antenna currents
down the braid.

So in theory, this should be two 100 ohm
impedances in parallel, for a total of 50 ohms,
which can them be fed with garden variety RG-8 or
RG-213.

Any advice or input is greatly appreciated.

Slick

1601. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 21:20:03 UTC
From: Gareth's Memory <someone@microsoft.com>
Message-ID: <2nq845F3itltU1@uni-berlin.de>
Source record: 91122
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2npmk4F3d337U1@uni-berlin.de...
> It quite possibly is - both halves of the monopole
> are just that bit longer than arm's length.
>
> Yes - I've done that before - last year during a lull in
> interest I used the aluminium elements of an HF beam
> kit to make up the legs for the testing horse for
> my clocks, on the basis that the cheapest thing that
> you can buy is always more expensive than the most valuable
> thing in your junk box!
>

Have you ever actually made a clock? Somehow I doubt your engineering skills
are up to that.

1602. Re: "Diamond CoLinear"?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 21:22:25 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nq8c2F3f5ivU1@uni-berlin.de>
Source record: 91123
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

"Airy R. Bean" <me@privacy.net> wrote in message
news:2npha4F21tagU1@uni-berlin.de...
> Anybody know anything about the internal configuration
> of these?
>
> I bought one on behalf of my friend yesterday at Wimborne
> to replace the 5/8ths one (not a colinear - misunderstanding)
> that had been badly manufactured (q.v.)
>
> On this Diamond, it gives an SWR of 1.01:1 and yet a DC test
> shows no continuity between the centre of the coax and the
> vertical radiator - the outer of the coax shows a dead short
> to the monopole.
>
> How are these things wired internally? - Mystified
>
Simple, series capacitor and parallel inductor.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1603. Re: Q R S song - new!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 21:25:33 UTC
From: k3pi@arrl.net
Message-ID: <53da5b99.0408091325.17c2d8cc@posting.google.com>
Source record: 91124

Thanks Bob!

"9V1GO" <rmread@starhub.net.sg> wrote in message news:<41170c2d@news.starhub.net.sg>...
> >
> > Feedback very welcome & appreciated...here or to
> > hindsight@radiointel.com
> >
> Good site, some really funny bits on the links, I enjoyed the browse.
>
> 73
>
> Bob 9V1GO

1604. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 21:57:03 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nqacvF3hi2fU2@uni-berlin.de>
Source record: 91125
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

```
"Starr" <thick.as@plank.net> wrote in message
news:cf8car$mo0$0@pita.alt.net...
> Frank Turner-Smith G3VKI wrote:
> > "Starr" <thick.as@plank.net> wrote in message
> > news:cf5eb0$31r$0@pita.alt.net...
> >>
> >>
> >> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in
> >> message news:2nl3bbF21i9hU1@uni-berlin.de...
> >>> "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
> >>> news:2njlieF1efb1U1@uni-berlin.de...
> >>>> SWR - Succulent With Ratatouille.
> >>>>
> >>> A - Arrogant
> >>> I - Ignorant
> >>> R - Rude
> >>> Y - Yob
> >>>
> >>> R - Ridiculous
> >>>
> >>> B - Bullshit
> >>> E - Excrement
> >>> A - Anal
> >>> N - Nasty
> >>>
> >>> ...(_!_)...
> >>>
> >>>
> >> Beany can be a huge arsehole at times...
> >
> > That's why he's known as The Anus
> >
> > ... but now you are attacking him on
> >> inoffensive remarks.
> >> Not good.
> >>
> > Bean is an open target - he has no human rights since he is not human.
>
> Oh i'm not worried about him, I'm worried for you. It's starting to become
> an obession. Just ignore the tosser.
>
Thanks, but I've got a life outside this NG. Anus baiting is just an 'after
a few beers' pursuit.
```

--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1605. Re: EMI Supression Required for Satellite Receiver

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 23:20:38 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41180902_3@news1.prserv.net>
Source record: 91126

Harmonics of the switching power supply which is on all the time so the remote can function. RF transparent case and a dipole consisting of the AC cable for one leg and the cable and dish for the other. Probably more efficient than anything a ham could come up with for a disguise antenna. I'd be curious what the fundamental is, but some of those pulse width modulated supplies are getting pretty high in frequency.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:9nuch0tm6bdb80f3942l8e40qi7c0ki05b@4ax.com...
> On Fri, 06 Aug 2004 21:32:16 +0100, anc <anc@nospam.co.uk> wrote:
>
> >emits strong modulated tones at AM frequencies centered on 1400KHz, even
> >when the unit is in standby mode.
>
> Hi OM,
>
> Buy a power line, in-line RF filter. Sounds like you have a very
> strong AM station nearby, and it is comming in through the power lead.
>
> 73's
> Richard Clark, KB7QHC

1606. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-09 23:54:27 UTC
From: k9sqg@aol.com
Message-ID: <20040809195427.21388.00001217@mb-m18.aol.com>
Source record: 91127

Disconnecting coax, wire, etc. from the house with at least 10 ft spacing,
before storms arrive is a good idea in any case...

1607. Re: moxon vs quad

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 01:27:17 UTC
From: Ken Luther <sparkzz@aol.com>
Message-ID: <pan.2004.08.10.01.27.16.429412@aol.com>
Source record: 91128

Thanks for the info Keith -- I don't suppose you had a hexbeam test too,
in there anywhere..?? %-)

73's
Ken
KD5ZCL

1608. Re: moxon vs quad

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 02:59:27 UTC
From: KAZeringue <kazeringue@aol.com>
Message-ID: <jSWRc.166934$wH4.10400918@twister.southeast.rr.com>
Source record: 91129

Well, I found hexbeams pretty hard to build for 2 meters.

I did build a hex for 17, 15 and 10 meters. That's a fairly finicky design for homebrew--its tough to get the desired SWR bandwidth to match up with the desired beam pattern characteristics. Small variations in the geometry varies the resonance, even on those HF bands. It was hard for me to make a multiband hex funtion properly.

If you look up my postings on the hexbeam yahoogroup (user id there is kg4eqd), I made some pertinent comments there. Some of my comments are disputed by other builders, so use your own judgement.

I also found it difficult to reproduce the results from one hex to the next. Probably, my own shoddy construction was simply not precise enough, particularly the hex support. Moxons and quads are simple by comparison.

I spent LOTS more time tuning and adjusting the hexes than on any other project. It was fun in its own demented way.

Once tuned, they did have good f/b ratios, even at low heights.

I left the multibander up. It got ripped by an ice storm here a couple of winters back, and I don't intend to rebuild it.

With all that said, my homebrew hexes had a really nice null, were not prone to yagi static noise, and probably had a bit more gain than a dipole. The f/b ratio was much better than a two element yagi at the same height, but I doubt it had the same amount of gain as a two element yagi. Maybe close, but certainly not more.

If you have restricted space, I satisfied myself that the hex antenna works well for a restricted space. I'd recommend plunking down the "small fortune" for the commercial, rather than try to build one.

Unless you just enjoy demented antenna fun....

Hey, I know where Jefferson Parish is---I myself am a "Harvard on the Bayou" graduate. Pooo-yi! Where y'at! Just don't tell me you are a Tulane fan....

email direct for more

73,
Keith, W4KAZ

1609. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 03:48:47 UTC
From: "aunwin@insightbb.com"
Message-ID: <zAXRc.278807$XM6.136214@attbi_s53>
Source record: 91130

If you place multiple loops in the correct order
there is no need to use a a harness. The trick is to connect
the loops in the correct order depending on the size of the loops. Feed
impedance is one of personal choice. This design easily beats the design
featured, A antenna program with variables will asign the correct distances
between and the correct order of the partial loops.
Have fun
Art
"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0408091216.911d128@posting.google.com...
> Good Evening,
>
> I'd like some advice on building the phasing harness
> required for the following antenna:
>
> http://members.tripod.com/~AMN92/cp_ant.htm
>
> It certainly would use 75 ohm RG-6, and i
> believe it would be 1 full wavelength, fed in the
> center, with the two bays on either end (1/2 wave
> to each antenna). You would also need 4 turns of
> 3-4" diameter coils in the RG-6 at the feedpoints,
> to serve as baluns, which decouples antenna currents
> down the braid.
>
> So in theory, this should be two 100 ohm
> impedances in parallel, for a total of 50 ohms,
> which can them be fed with garden variety RG-8 or
> RG-213.
>
> Any advice or input is greatly appreciated.
>
>
> Slick

1610. Taylor W2OZH Loop Antenna for 75-80M

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 04:51:46 UTC
From: nospam_deepsea_77@yahoo.com
Message-ID: <411852a1.14972530@news1.news.adelphia.net>
Source record: 91131

Questions on this antenna:

http://www.pcug.org.au/~prellis/amateur/space-miser-80m.html

1. Think this will stand 150 watts AM? That 300 ohm twinlead looks a
little fragile for a capacitor...

2. How critical is the actual ratio of length to height? Seems to
indicate a length of about 23-24 ft (upper end of band), and I only
have about a 20 ft run to work with...making the height a bit
taller... so the whole thing might come out a bit taller and a bit
narrower, once it was hung.

Thanks to the group in advance,

Lin/KJ6EF
For email responses, remove "nospam_".

1611. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 04:58:20 UTC
From: hhc314@yahoo.com
Message-ID: <7ce4e226.0408092058.1597a075@posting.google.com>
Source record: 91132
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

radio-operator@telus.net (Private) wrote in message
news:<d318809e.0408081853.5e06781a@posting.google.com>...
> Hello,
>
> I am looking for some advice on if the ground system featured below is
> sufficent or should be upgraded. It consists of:
>
> - 3 ground rods 10' each around the tower (bonded together)
> - 2 ground plates (one outside, one in the shack, also bonded
> together)
> - lightning arrestors and/or feedthrough adapters
> - tower to mast ground
> - interior coax switch (not shown)
>
> I provided some pictures below:
>
> http://www.telusplanet.net/~homac/exteriorground01.JPG
>
> http://www.telusplanet.net/~homac/exteriorground02.JPG
>
> http://www.telusplanet.net/~homac/exteriorground02a.JPG
>
> http://www.telusplanet.net/~homac/exteriorground03.JPG
>
> http://www.telusplanet.net/~homac/exteriorground04.JPG
>
> http://www.telusplanet.net/~homac/interiorground01.JPG
>
> http://www.telusplanet.net/~homac/interiorground02.JPG
>
> I am looking for constructive feedback.....
>
> Thank-you....
>
> Lloyd

Hi Lloyd,

Looks like a nice installation, although your grounding rods might be
placed farther apart, or augmented by some heavy gauge radial wires
(depending on your local ground condictivity).

What I did note missing was the mention of 'lightning chokes' wound in
the coax lines decending from the tower. These are basic to lightning

protection for broadcasting towers, but I've rarely seen them implemented by hams.

The idea of a lightning choke is to add a small amount of inductance to the coax so that if a direct lighting strike happens, the instantaneous current flowing though the outer jacked of the coax into your lightning arresters will at least have some amount of impedance limiting the current magnitude, thus reducing the probability of destruction of both the coax and the the arrester itself.

These chokes are more often than not implemented by winding a dozen or more turns of coax around a form (say a 4" diameter phenolic tube) prior to the arrester or spark gap.

Harry C.

1612. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 05:41:45 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <teZRc.4598$l96.1285@nwrddc04.gnilink.net>
Source record: 91133

Dr Slick

If you intend to use this antenna to transmit, as indicated in the article referanced, I couldnt be of much use to you. If you only want a omni-azimuth circularly polarized pattern in the VHF band, I could probably help.

Jerry

"Dr. Slick" <radio913@aol.com> wrote in message news:1d15af91.0408091216.911d128@posting.google.com...
> Good Evening,
>
> I'd like some advice on building the phasing harness
> required for the following antenna:
>
> http://members.tripod.com/~AMN92/cp_ant.htm
>
> It certainly would use 75 ohm RG-6, and i
> believe it would be 1 full wavelength, fed in the
> center, with the two bays on either end (1/2 wave
> to each antenna). You would also need 4 turns of
> 3-4" diameter coils in the RG-6 at the feedpoints,
> to serve as baluns, which decouples antenna currents
> down the braid.
>
> So in theory, this should be two 100 ohm
> impedances in parallel, for a total of 50 ohms,
> which can them be fed with garden variety RG-8 or
> RG-213.
>
> Any advice or input is greatly appreciated.
>
>
> Slick

1613. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 06:39:19 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <r4_Rc.12079$Yf6.1279@lakeread03>
Source record: 91134
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

"Harry Conover" <hhc314@yahoo.com> wrote
> radio-operator@telus.net (Private) wrote in message
news:<d318809e.0408081853.5e06781a@posting.google.com>...
> > Hello,
> >
> > I am looking for some advice on if the ground system featured below is
> > sufficent or should be upgraded. It consists of:
> >
> > - 3 ground rods 10' each around the tower (bonded together)
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> > together)
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> > I provided some pictures below:
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> >
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> >
> > http://www.telusplanet.net/~homac/exteriorground02a.JPG
> >
> > http://www.telusplanet.net/~homac/exteriorground03.JPG
> >
> > http://www.telusplanet.net/~homac/exteriorground04.JPG
> >
> > http://www.telusplanet.net/~homac/interiorground01.JPG
> >
> > http://www.telusplanet.net/~homac/interiorground02.JPG
> >
> > I am looking for constructive feedback.....
> >
> > Thank-you....
> >
> > Lloyd
>
> Hi Lloyd,
>
> Looks like a nice installation, although your grounding rods might be
> placed farther apart, or augmented by some heavy gauge radial wires
> (depending on your local ground condictivity).
>

> What I did note missing was the mention of 'lightning chokes' wound in
> the coax lines decending from the tower. These are basic to lightning
> protection for broadcasting towers, but I've rarely seen them
> implemented by hams.
>
> The idea of a lightning choke is to add a small amount of inductance
> to the coax so that if a direct lighting strike happens, the
> instantaneous current flowing though the outer jacked of the coax into
> your lightning arresters will at least have some amount of impedance
> limiting the current magnitude, thus reducing the probability of
> destruction of both the coax and the the arrester itself.
>
> These chokes are more often than not implemented by winding a dozen or
> more turns of coax around a form (say a 4" diameter phenolic tube)
> prior to the arrester or spark gap.
>
> Harry C.

Harry, that winding of coax may be useful as an RF choke, but it is most certainly not a lightning choke, and will act more like an air-wound transformer than anything else. Not only is this not specified for any lightning protection systems, it is specifically warned against in many.

Jack Painter
Virginia Beach VA

1614. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 11:12:03 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <742Sc.9886$nx2.1221@newsread2.news.atl.earthlink.net>
Source record: 91135
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

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Listen to Alternative News and Conversation You Won't Hear On Commercial
Radio.
Visit http://live365.com/stations/pascoradio
YOU HAVE BEEN WARNED!

First Time Users May Be asked To Do A 1 Time Setup.
"Jack Painter" <223bthp@cox.net> wrote in message
news:r4_Rc.12079$Yf6.1279@lakeread03...
>
> "Harry Conover" <hhc314@yahoo.com> wrote
> > radio-operator@telus.net (Private) wrote in message
> news:<d318809e.0408081853.5e06781a@posting.google.com>...
> > > Hello,
> > >
> > > I am looking for some advice on if the ground system featured below is
> > > sufficent or should be upgraded. It consists of:
> > >
> > > - 3 ground rods 10' each around the tower (bonded together)
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> > >
> > > http://www.telusplanet.net/~homac/exteriorground03.JPG
> > >
> > > http://www.telusplanet.net/~homac/exteriorground04.JPG
> > >
> > > http://www.telusplanet.net/~homac/interiorground01.JPG
> > >
> > > http://www.telusplanet.net/~homac/interiorground02.JPG
> > >
> > > I am looking for constructive feedback.....
> > >
```

> > > Thank-you....
> > >
> > > Lloyd
> >
> > Hi Lloyd,
> >
> > Looks like a nice installation, although your grounding rods might be
> > placed farther apart, or augmented by some heavy gauge radial wires
> > (depending on your local ground condictivity).
> >
> > What I did note missing was the mention of 'lightning chokes' wound in
> > the coax lines decending from the tower. These are basic to lightning
> > protection for broadcasting towers, but I've rarely seen them
> > implemented by hams.
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> > The idea of a lightning choke is to add a small amount of inductance
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> > instantaneous current flowing though the outer jacked of the coax into
> > your lightning arresters will at least have some amount of impedance
> > limiting the current magnitude, thus reducing the probability of
> > destruction of both the coax and the the arrester itself.
> >
> > These chokes are more often than not implemented by winding a dozen or
> > more turns of coax around a form (say a 4" diameter phenolic tube)
> > prior to the arrester or spark gap.
> >
> > Harry C.
>
> Harry, that winding of coax may be useful as an RF choke, but it is most
> certainly not a lightning choke, and will act more like an air-wound
> transformer than anything else. Not only is this not specified for any
> lightning protection systems, it is specifically warned against in many.
>
> Jack Painter
> Virginia Beach VA
>
> Hello All. First let me comment that the lightning mitigation techniques
used are better than many ham installations. That being said, I would
increase the conductor size between the tower legs and the ground rods.
When I saw these, I thought a "fast acting fuse." The amount of current
that the tower can handle cannot be safely terminated to ground with smaller
conductors.

Also, the screw terminals need to be checked periodically because they will
loosen themselve due to "cold flow." Why not repace them with crimp types
and then solder the crimp with a torch as a back up? I am asuming that this
device is covered by something to protect it from rain, etc?

John-WA4JM, Dade City, FL, home to some of the most ferocious lightning
activity in the western hemisphere.

1615. Re: Antenna tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 11:32:02 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <fp3hh0p35olndls17jmj5u00bvj01lgtp6@4ax.com>
Source record: 91136

On Sun, 11 Apr 2004 13:31:22 -0500, Cecil Moore
<Cecil.A.Moore@ieee.org> wrote:

>Dave VanHorn wrote:
>> Absolutely. Whenever I see a gain number that dosen't reference something,
>> I assume they mean dBi, rather than dBd.
>
>Looks like some antenna retailers reference dBdl. :-)
>(dl stands for dummy load)

Actually it appears as if some manufacturers only measure the
directivity and express it in dB :-), completely ignoring the
efficiency, which is often quite low in "exotic" antenna designs.

An exotic antenna design with directivity 10 (10 dB) and 10 %
efficiency will have a 0 dB gain and will produce the same effective
radiation power (ERP) as an omnidirectional (directivity 1 or 0 dB)
antenna with 100 % efficiency when using the same transmitter power.

Paul OH3LWR

1616. Re: Shielded loop for RCVR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 11:32:05 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <7i8hh05r61nfq7u0ge3mk372na2vjh1srf@4ax.com>
Source record: 91137

On Tue, 13 Jul 2004 17:57:21 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>OH, for Pete's sake. Loops are sensitive to the H vector. Wires receive
>the E vector. Most near field noise tends to be predominantly E field.
>But, that seems to only be effective up to 3 or 4 MHz, due to the wavelength
>factor, i. e. the near field shrinks as you go higher in frequency. Fully
>formed far field wavefronts of noise sources will be just like wanted
>signals, and unless some polarization difference is available, then
>directivity is the only way to improve S/N. Only in special circumstances
>can you see much improvement above 5 MHz due to near field/far field
>differentiation.

In the _far_ field both the E and H fields are inversely proportional
to distance and have the 120 pi (377 ohm) relation (impedance) between
the fields. However, in the _near_field_ (<< 1 lambda) the 377 ohm
relationship is no longer valid and the magnetic field is inversely
proportional to the square of the distance, while the electric field
is inversely proportional to the cube of distance.

Summarising the graph from an article by Lloyd Butler VK5BR in Amateur
Radio, August 1990: The output voltages from both E and H field
antenna system are calibrated to the same value at 1 lambda (i.e. in
the far field). The antennas are moved closer, when the E and H
antennas are moved to 0.05 lambda, the E antenna delivers 50 dB and
the H antenna 40 dB (relative to 1 lambda) i.e. the H-field is 10 dB
quieter. At 0.005 lambda, the E field antenna output is 110 dB and the
H-field 80 dB, i.e. the H field antenna is 30 dB is quieter.

Thus, with same far field sensitivity, the sensitivity to very local
interference is attenuated considerably when _only_ the H field is
used. However, at 3.5 MHz and 80 m wavelength, 0.05 lambda corresponds
to 4 m and 0.005 lambda to 40 cm, so we are talking about really close
noise sources. At even higher frequencies the number of potential
interference sources is dropping within the 0.05 (or even 0.1) lambda
radius from the receiving antenna, in which the H antenna has an
advantage.

However, on the 135 kHz LF band (lambda 2.2 km), the distances would
be 110 m resp. 11 m, thus much more unwanted interface sources could
be eliminated.

Shielding the H-loop simply prevents the stronger E field from
entering the loop and thus destroying part of the advantage of using
the H-antenna.

Paul OH3LWR

1617. 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 11:41:48 UTC
From: sjbeyers@trianglenet.net
Message-ID: <72befaab.0408100341.406d5335@posting.google.com>
Source record: 91138

In the past, I've seen several references here to feedlines consisting of 300-ohm transmitting-type twin lead buried in PVC pipe. Does anyone have any suggestions on what size pipe to use, and how to keep the line centered in the pipe?

Steve W9HJW

1618. Re: Multiband HF Antenna Nipping | Bottom Up or Top Down?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 13:12:59 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408100512.4e99c7b@posting.google.com>
Source record: 91139

Cecil Moore <w5dxp@hotmail.com> wrote in message
news:<41167df5$1_4@corp.newsgroups.com>...
> Richard Clark wrote:
> > Common advice I've seen is work with the most wire first.
>
> Common advice using common sense. An 80m dipole can be close
> to resonance on 10m (big effect) but a 10m dipole is completely
> non-resonant on 80m (virtually no effect). And a 5% adjustment
> to an 80m length equates to a 40% adjustment to a 10m length.

Been there, just did it to a Field Day G5RV . . Uggg . . "Tack some
wire back on it."

> In mathematical terms, tuning the shortest wavelength antenna
> first is a *diverging* infinite series, good for sun tans
> but bad for ham operating time.

Richard:Cecil: Makes sense, bottoms up!

Tnx.

w3rv

1619. Re: W8JK Passes

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 16:27:12 UTC
From: Jim Weir <jim@rst-engr.com>
Message-ID: <lothh0t0c18gpmv5vigtpjjvalqi26k57j@4ax.com>
Source record: 91140

He will live for a hundred years, and a hundred years after that in his work and his writings. What a brilliant and kind soul...

Jim

richardharrison@webtv.net (Richard Harrison)
shared these priceless pearls of wisdom:

Too bad Kraus did not live another 100 years.

Jim Weir, VP Eng. RST Eng. WX6RST
A&P, CFI, and other good alphabet soup

1620. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 19:07:20 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0408101107.45288381@posting.google.com>
Source record: 91141

Well, so far the best advice was from someone who will
remain anonymous, who emailed me personally:

> If you're hooking up two of these antennas in parallel, and using a
phasing harness which is one [electrical] wavelength long with a
feedpoint in the center, then it doesn't matter whether you use 75-ohm
coax or a different variety. The 1/2 wavelength of coax from the
antenna connection point to the central feedpoint will "mirror" the
antenna's impedance down to the central connection point - the coax's
impedance drops out of the equation.

You might get slightly lower losses (all else being equal) if you use
a 1-wavelength piece of 93-ohm coax. As this is close to the 100-ohm
antenna impedance, the SWR on the coax will be quite low and you'll
have low resistive losses in the cable. This is probably not a
significant issue, though, when you have only 1/2 wavelength of
attenuation to worry about.

> You would also need 4 turns of
>3-4" diameter coils in the RG-6 at the feedpoints,
>to serve as baluns, which decouples antenna currents
>down the braid.
>
> So in theory, this should be two 100 ohm
>impedances in parallel, for a total of 50 ohms,
>which can them be fed with garden variety RG-8 or
>RG-213.

Yah - that'll work.

The parallel tubes to the feedpoint form a version of the "universal
stub" impedance matching system. A fully-generalized universal stub
is usually made 1/2 wavelength long (from the antenna elements back to
the mechanical mounting point). You then tune the feedpoint impedance
(resistive and reactive) by adjusting _two_ things - the point at
which the feedline connects to the stub pipes (as done in the
instructions on this page), and also the position of a shorting strap
which is connected directly between the stub pipes at some point
between the feedline connection and the mechanical mount point. A
universal stub provides you with a very great amount of flexibility in
choosing your feedpoint impedance.

Another method sometimes used to feed antennas like this, is to use a
halfwave coaxial balun rather than a choke-balun loop. You'd
construct the usual sort of 4:1 half-wave coax balun, connect the

high-impedance balanced side of this to the stub/support pipes, and drive the low-impedance unbalanced side from your coax matching harness. This seems to be the method favored in the ARRL's VHF book (older version, at least) for feeding balanced antennas from a coax... I believe it provides better, more-predictable current balance than you can get using a choke balun, as long as you can accept the relatively narrow bandwidth of such an arrangement.

To use this approach with the antenna in this page, you'd certainly need to move the position of the feedpoint pipe clamps, since you'd want/need to connect at a higher-impedance point on the stub arms. You might find it necessary to cut the stub arms somewhat longer, and use a separate shorting strap - i.e. convert to something closer to a true "universal stub" arrangement. Might or might not be worth the trouble.

1621. Re: 2M 5/8th, "Mirage Antennas", MJ Components, HCC Pro-Am

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 21:39:56 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <bcfih01spddi8anf90ngaic2qfi8gsb29k@4ax.com>
Source record: 91142

On Sat, 7 Aug 2004 18:37:25 +0100, "Airy R. Bean" <me@privacy.net>
wrote:

>Does anyone have experience of the antenna of the title, which came
>with all 3 suppliers info included? I purchased it at Longleat about
>5 years ago, but never got round to using it. Now trying to install
>it at my friend's QTH to get him going
>
>I've just spent a very frustrating afternoon trying to put
>this thing up, and when it was up, it exhibited a resistance of
>200 Ohm between coax inner and outer.
>
>Assumption - error in soldering PL259 - no - still does it.
>(During which resoldering exercise the bit fell out of the
>brand-new Draper 100w iron and burnt a hole in the carpet,
>forcing a hasty exit because of toxic fumes, followed by a hasty
>re-entry to pick it up because the fumes were increasing and not
>abating!.)
>
>Then there were incompatibilities between different PL259's,
>for example, some have a shoulder deep inside which prevents
>the braid from reaching the soldering holes.
>
>Then a PL259 where the thread of the locking tube was longer
>than the thread of the SO239 inside the antenna so it didn't lock
>the outer and the whole plug swivelled loosely.
>
>Separate cable from antenna and both show open circuit, as you'd
>expect. Couple them together and 200 Ohm loop resistance. Ignoring
>any RF theory, coupling together two open circuits, one on a PL259
>and the other on a SO239 just cannot result in a resistance of 200
>Ohms! It's plain ornery DC electricity!
>
>I'm banging my head against the wall! Any suggestions?
>
>
>

I'd just start over on the plugs.

Get some standard PL-259 plugs. Not junk, but good ones (try The
Wireman if you don't have a local source).

Get a 120 watt or better soldering iron -- the Weller SP-120 or 175
are good ones. You need plenty of heat to properly solder the braid

through the little holes in the barrel.

Open your ARRL Amateur Radio Handbook to chapter 22. Precisely follow the instructions and measurements for fitting the coax to the plug.

Replicate the instructions and you cannot go wrong.

Otherwise, order some coax with the plugs already on it :-)

Bob
k5qwg

1622. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 21:54:41 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-3FA389.14544110082004@morgoth.sfu.ca>
Source record: 91143

In article <72befaab.0408100341.406d5335@posting.google.com>,
sjbeyers@trianglenet.net (Steve Beyers) wrote:

> In the past, I've seen several references here to feedlines consisting
> of 300-ohm transmitting-type twin lead buried in PVC pipe. Does
> anyone have any suggestions on what size pipe to use, and how to keep
> the line centered in the pipe?

Use two concentric PVC pipes, the diameter of the smaller one large
enough to admit the twin lead and the diameter of the larger one large
enough to keep the surrounding ground far enough away. I should think
that 10 times the twin lead wire spacing ought to be far enough.

Centering the twin lead inside the inner PVC pipe is unimportant,
assuming that the PVC is low-loss stuff. Centering the inner pipe inside
the outer pipe is important. Keeping water, ground, and other things out
of the space between the pipes is important.

Make sure you don't have common mode current on the twin lead; it won't
radiate very far if you do, but you may overheat some earthworms.

Or you could just use coax and avoid the problem ;-)

David, ex-w8EZE

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

1623. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 22:17:07 UTC
From: hhc314@yahoo.com
Message-ID: <7ce4e226.0408101417.a9421d5@posting.google.com>
Source record: 91144
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

"Jack Painter" <223bthp@cox.net> wrote in message
news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> "Harry Conover" <hhc314@yahoo.com> wrote
> > radio-operator@telus.net (Private) wrote in message
> news:<d318809e.0408081853.5e06781a@posting.google.com>...

> >
> > What I did note missing was the mention of 'lightning chokes' wound in
> > the coax lines decending from the tower. These are basic to lightning
> > protection for broadcasting towers, but I've rarely seen them
> > implemented by hams.
> >
> > The idea of a lightning choke is to add a small amount of inductance
> > to the coax so that if a direct lighting strike happens, the
> > instantaneous current flowing though the outer jacked of the coax into
> > your lightning arresters will at least have some amount of impedance
> > limiting the current magnitude, thus reducing the probability of
> > destruction of both the coax and the the arrester itself.
> >
> > These chokes are more often than not implemented by winding a dozen or
> > more turns of coax around a form (say a 4" diameter phenolic tube)
> > prior to the arrester or spark gap.
> >
> > Harry C.
>
> Harry, that winding of coax may be useful as an RF choke, but it is most
> certainly not a lightning choke, and will act more like an air-wound
> transformer than anything else. Not only is this not specified for any
> lightning protection systems, it is specifically warned against in many.

> Jack Painter
> Virginia Beach VA

Jack, while I'm sure that you believe this, I really can't guess where
you obtained such IMHO such massive misinformation.

First of all, it is the purpose the the coiled coax to act as an
inductor (r.f. choke) because this is how it resists the very rapid
di/dt common mode characteristic associated with a lightning hit, thus
limiting the peak discharge energy that the following spark-gaps and
lightning suppessors must absorb and reducing the overall peak impulse
power damage potential.

It's basically a brute-force version of the common computer technique
of placing a ferrite torroid around cables to attenuate their common

mode impulse transmission/conduction ability. Realize that with sufficiently low SWR, currents through both the inner conductor and outer shield of a coax are equal, summing to zero, hence there is no net electromagnetic field produced. The same is not true for a common mode impulse traversing the transmission line. The bottom line is that only the common mode impulse resulting from a lightning strike will experience the results of the "choke".

I'm not sure why you would believe that a coil of coax would act like a 'transformer' of any type, unless the SWR is truly enormous, a probem in itself. A case in point is that in both proton synchrotrons (typically operating in a swept frequency range of roughly 3-30 Mhz), and in large phased array radars (some of which operate in the UHF range) employ multiple feeder coax transmission lines that are cut the the same electrical length, with the cable lengths in excess of the required physical run length being coiled up somewhere in the system. There is no net significant electrical effect on the cable's transmission characterists in either case.

Prior to completing my degree work at Drexel, I spent 8-years installing and maintaining broadcast transmission systems ranging from 5-Kw to 50-Kw. This included 5 years as chief engineer in one station (WBUD in Trenton, NJ) plus part-time work for WFIL, WCAU, and KYW in Philly. (Additional work in 4 or 5 smaller stations.)

Quite honestly, I can't remember a single one of these that did not protect their very costly antenna installations, transmitters, and on-air reliability without lightning chokes employed in their transmission lines. Still, these broadcasters use equipment that, in general, nothing more sophisticated than your average ham station, but on steroids! True, the average AM broadcasting tower usually exceeds 200-feet, but in an intense lightning storm, a 40-foot ham tower is fully capable of experiencing the same energy lightning hit!

I purchased my first ham receiver, an SX-71 from a ham named Bob Rutkowski (sp?) in Trenton, NJ. A day or so before I picked it up from him he took an evidently direct lightning hit on his 40-some foot crank up tower holding a 2M beam that was attached to his house. He had grounded the outer shield of the RG-8U coax at the based of the tower, but without a lightning choke in the coax, the hit simply vaporized the majority of his RG-8U, his grounding connection, and most of the final tank circuit in his rig in the basement! Not a pretty sight!

Realize that a commercial radio broadcaster has to survive episodes like this without disruption of their operations. Hams don't. Still the emulation of the broadcaster's time proven protection techniques involves only a small additional cost to an otherwise excellent installation.

For more information, see:

Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company, New York. (My issue carries a 1952 copyright, still it's an 'oldie but a goodie' with many subsequent editions -- and AFAIK is still the bible of the broadcasting industry.)

IIRC, early editions of the ARRL Handbook also described this protection technique (likely pre-1970) in the days when most hams built their own rigs.

Harry C.

p.s., Jack, I'd love to hear a citation where "it is specifically warned against", and why.

1624. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 22:18:01 UTC
From: jgboyles@aol.com
Message-ID: <20040810181801.07086.00000780@mb-m17.aol.com>
Source record: 91145

>Excuse me Gary. I don't bother with a computer (GIGO) program to teach me
>what I learned by experience.

What makes you think I am talking about a modeling program? I have been playing with antennas for 45 years. I can work my way through EZNEC, and I had to learn that also.
Maybe you should spend some quality time with a good modeling program. I think you will find the results agree with that vast amount of practical experience you have.
73 Gary N4AST

1625. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-10 23:55:57 UTC
From: Henry Kolesnik <kolesnik@sbcglobal.net>
Message-ID: <hgdSc.5237$as4.3191@newssvr23.news.prodigy.com>
Source record: 91146

Twist the twin lead two or three turns per foot just so it doesn't kink or
try to unwind, and pipe in a pipe would be a plus.

--
73
Hank WD5JFR
"Steve Beyers" <sjbeyers@trianglenet.net> wrote in message
news:72befaab.0408100341.406d5335@posting.google.com...
> In the past, I've seen several references here to feedlines consisting
> of 300-ohm transmitting-type twin lead buried in PVC pipe. Does
> anyone have any suggestions on what size pipe to use, and how to keep
> the line centered in the pipe?
>
> Steve W9HJW

1626. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 00:38:50 UTC
From: "aunwin@insightbb.com"
Message-ID: <uUdSc.237968$%_6.185742@attbi_s01>
Source record: 91147

Yes, that does seem a reasonable aproach if you want to use the antenna that you describe.
It does give me thought about the new revolutionary antenna and the impact it will have on radio.
Since antenna gain is going up I assume that tyhe FCC will force amateur operators to rein in their power to say 400 watts max.
It also suggests that many cell towers will now be redundant and cell phones will have a laminated circuit board
antenna that will fullfill the dreams for which the fractal antennas.had hopede for.It undoubtedly is the same antenna that I alluded to earlier as they point to wide band as well as antenna size and gain as well as distributed loads around a monopole which in itself
provides higher impedances than the norm of a 5/8 whip. With the higher gain antennas I can't see anyway that we can hold on to the
10 metre band as truckers will now require more bands as interference increases.
The good thing that will come from this new antenna/patent is that it will show that hams can provide technology even tho the new antenna
does not have the appearance that is earth shaking and all will say when they see it that they 'knew the design all the time' and just
didn't get around to making one(personal experience showing here). Mark my words, the naysayers and know all's on this group will change there posture overnight
and people will then accept the advantage of loops and their close coupling advantages which is distinctly different to mutual coupling
that is oft bandied around..This fits nicely with the combination loop/dipole antenna once I resolve how to calculate the actual inductance of the arrangementi
Amateur radio is now poised to enter a new phase in the hobby as will wireless computors.
Slick I suggest you hold off building that antenna and harness.and wait and see if this new antenna better fits your needs.
Cheers and beers
Art

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0408101107.45288381@posting.google.com...
> Well, so far the best advice was from someone who will
> remain anonymous, who emailed me personally:
>
>
>
>snip

1627. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 01:08:38 UTC
From: dplatt@radagast.org
Message-ID: <10hiscmelgea9bc@corp.supernews.com>
Source record: 91148

In article <uUdSc.237968$%_6.185742@attbi_s01>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>Yes, that does seem a reasonable aproach if you want to use the antenna that
>you describe.

>It does give me thought about the new revolutionary antenna and the impact
>it will have on radio.

On reading your comments, Art, my feeling is that you've swallowed the
glowing claims in the original press releases hook, line, and sinker,
and as a result you are greatly over-estimating the likely impact of
this "revolutionary" technology.

I'll make some counterpredictions.

>Since antenna gain is going up I assume that tyhe FCC will force amateur
>operators to rein in their power to say 400 watts max.

I predict that this "new" technology (which from what I read is not
actually all that innovative) will have little practical effect on the
gain structures of most amateur-radio antennas, at least as far as HF
antennas go. Although it might be possible to use it to reduce the
size of some antennas (for a given amount of gain), I doubt that it
will be applied in ways which result in significant increases in
directional gain for amateur antennas. High gain isn't always a good
thing.

Counterprediction: it will _not_ result in FCC rule changes to reduce
maximum-legal power.

>It also suggests that many cell towers will now be redundant and cell phones
>will have a laminated circuit board
>antenna that will fullfill the dreams for which the fractal antennas.had
>hopede for.

It might reduce the sizes of the antennas used in cell phones.
They're pretty tiny already.

It almost certainly will not be used to increase the gain of those
antennas. High directional gain in a cellphone is as likely to hurt
performance as help it.

It might reduce the sizes of the individual antennas on cellphone
towers. I really doubt that it will reduce the _number_ of such
towers. Cellphone tower placements are often dictated by the number

of channels available vs. the number of calls to be handled, and the antennas are deliberately designed with controlled look-down gain patterns so that towers can be placed closer together without interfering.

High gain is, again, not necessarily a good thing. Aiming the gain pattern "further out" to increase coverage far away from the tower, and reduce the need for additional towers, would require boosting both transmitter power and receiver sensitivity to fill in the near-in pattern. It would probably also require increasing the number of channels per tower. Not necessarily a good idea, economically.

Counter-prediction: this development will not, in and of itself, result in a reduction in the number of cellphone towers.

> It undoubtedly is the same antenna that I alluded to earlier
>as they point to wide band as well as antenna size and gain as well as
>distributed loads around a monopole which in itself
>provides higher impedances than the norm of a 5/8 whip. With the higher gain
>antennas I can't see anyway that we can hold on to the
>10 metre band as truckers will now require more bands as interference
>increases.

I view this as a minor effect on the 10-meter/11-meter question. Issues such as FCC enforcement (or lack thereof) will have far more of an effect on the viability of the 10-meter band.

Counter-prediction: lots of commercial CB companies will jump on this bandwagon and start marketing versions of this "new, revolutionary" antenna structure; many of the claims made by such manufacturers will be deceptive or fraudulent, and the actual effect of the fielding of such antennas into the CB user community will be negligible-to-minor.

>The good thing that will come from this new antenna/patent is that it will
>show that hams can provide technology even tho the new antenna
>does not have the appearance that is earth shaking and all will say when
>they see it that they 'knew the design all the time' and just
> didn't get around to making one(personal experience showing here). Mark my
>words, the naysayers and know all's on this group will change there posture
>overnight
>and people will then accept the advantage of loops and their close coupling
>advantages which is distinctly different to mutual coupling
>that is oft bandied around.

It seems to me that you are leaping to the conclusion that this "invention" ties into your own work and ideas. I see little so far to justify that.

> This fits nicely with the combination
>loop/dipole antenna once I resolve how to calculate the actual inductance of
>the arrangementi

When you do, please provide some accurate and reliable details, so
that others can reproduce your developments and study them. Such have
been lamentably absent, I believe, in your previous discussions.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1628. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 02:22:28 UTC
From: sjbeyers@trianglenet.net
Message-ID: <72befaab.0408101822.4af07f04@posting.google.com>
Source record: 91149

David Ryeburn <ryeburn@sfu.caz> wrote in message
news:<ryeburn-3FA389.14544110082004@morgoth.sfu.ca>...
> In article <72befaab.0408100341.406d5335@posting.google.com>,
> sjbeyers@trianglenet.net (Steve Beyers) wrote:
>
> > Centering the inner pipe inside
> the outer pipe is important.
> David, ex-w8EZE

How is the inner pipe held in the centered position?

Steve W9HJW

1629. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 02:29:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9u0jh0lua95vlqs28cc32faliri9rd31gm@4ax.com>
Source record: 91150

On 10 Aug 2004 19:22:28 -0700, sjbeyers@trianglenet.net (Steve Beyers)
wrote:

>How is the inner pipe held in the centered position?
>
>Steve W9HJW

Hi Steve,

Wrap a small tube around it loosely, like in a air core coax. -Hmm-
Have you thought of simply building a large scale coax?

73's
Richard Clark, KB7QHC

1630. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 02:59:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <XXfSc.241290$IQ4.147543@attbi_s02>
Source record: 91151

David
Idid describe an antenna that will do all the things that the new patent claims and
it would not surprise me i9n the least if it turns out to be of the same design.
I am not a guru so I am not a prisoner to past accomplishments and am able to focus
purely on max radiation per unit length. Tome the loop is a prime example in that it produces
not only more gain per unit length but also has an additive vector radiation in a similar way
centrifugal forces add a vector even tho the electrons
have a constant speed. It does not take a rocket scientist to visualise that an antenna
with a figure 8 circuit would change the radiation field.(clockwise + counterclockwise radiation)
The other point to remember is that true coupling can increase the current in an element
while reducing its voltage and it is current which we hamms are interested in.
Ofcourse if your radiator melts then it shows good coupling and the element has to be larger in diameter.
Now I know that what I say is basic but it apears that hams are locked into a rut when thinking about
new design and if the new patented antenna melted then I suspect he under estimated the increased
current created by coupling. Now because feed impedance is so important to the ham it will be important
to have a unconnected vertical placed inside the coil perimeters which allows by coupling the ability
to meet impedance requirementst
Now David I know hams do not like to pursue the idea of maxcimum radiation per unit length but
if you have a computor program that can use variable dimensions to meet specs then I have provided
enough info for those that are interested but I suspect that most are inately lazy and prefer to0 await the unveiling
at the end of this month. By the way in the description of the multi loop I made no reference to use of
clockwise and counter clockwise travel a statistic that is very important as is the center pole.
Am I sold on the idea of a different aproach to antennas, you bet I am as this aproach provides a

flattening of the take off angle on the horizon at the expense of higher
angle radiation which for cell type frequency
is wasted energy
Cheers and beers
Art

"Dave Platt" <dplatt@radagast.org> wrote in message
news:10hiscmelgea9bc@corp.supernews.com...
> In article <uUdSc.237968$%_6.185742@attbi_s01>,
> aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
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> >Yes, that does seem a reasonable aproach if you want to use the antenna
that
> >you describe.
>
> >It does give me thought about the new revolutionary antenna and the
impact
> >it will have on radio.
>
> On reading your comments, Art, my feeling is that you've swallowed the
> glowing claims in the original press releases hook, line, and sinker,
> and as a result you are greatly over-estimating the likely impact of
> this "revolutionary" technology.
snip

1631. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 04:03:44 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <u86dnR_B54QOB4TcRVn-ow@comcast.com>
Source record: 91152

"Steve Beyers" <sjbeyers@trianglenet.net> wrote in message
news:72befaab.0408100341.406d5335@posting.google.com...
> In the past, I've seen several references here to feedlines consisting
> of 300-ohm transmitting-type twin lead buried in PVC pipe. Does
> anyone have any suggestions on what size pipe to use, and how to keep
> the line centered in the pipe?
>
> Steve W9HJW

They used to make shielded 300 Ohm line. You could run that through
anything, so long as it is dry.

Tam/WB2TT

1632. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 04:10:44 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <X_gSc.4804$LH.551@bignews4.bellsouth.net>
Source record: 91153

be careful about condensation - twin lead is pretty picky about its
surrounding

"Steve Beyers" <sjbeyers@trianglenet.net> wrote in message
news:72befaab.0408100341.406d5335@posting.google.com...
> In the past, I've seen several references here to feedlines consisting
> of 300-ohm transmitting-type twin lead buried in PVC pipe. Does
> anyone have any suggestions on what size pipe to use, and how to keep
> the line centered in the pipe?
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> Steve W9HJW

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004

1633. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 04:20:29 UTC
From: radio-operator@telus.net
Message-ID: <d318809e.0408102020.75d30c2f@posting.google.com>
Source record: 91154
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Thank-you for the advice to this point. I think I will invest in the
rotator cable ground. Not sure what to do about the lightning choke.

I don't mind replacing the antenna/mast if I receive a direct
lightning hit, I just dont want to turn be fried to a crisp.....

Lloyd

hhc314@yahoo.com (Harry Conover) wrote in message
news:<7ce4e226.0408101417.a9421d5@posting.google.com>...
> "Jack Painter" <223bthp@cox.net> wrote in message
news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> > "Harry Conover" <hhc314@yahoo.com> wrote
> > > radio-operator@telus.net (Private) wrote in message
> > news:<d318809e.0408081853.5e06781a@posting.google.com>...
>
> > >
> > > What I did note missing was the mention of 'lightning chokes' wound in
> > > the coax lines decending from the tower. These are basic to lightning
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> > > The idea of a lightning choke is to add a small amount of inductance
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> > > Harry C.
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> > Jack Painter
> > Virginia Beach VA
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> di/dt common mode characteristic associated with a lightning hit, thus
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> of placing a ferrite torroid around cables to attenuate their common
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> outer shield of a coax are equal, summing to zero, hence there is no
> net electromagnetic field produced. The same is not true for a common
> mode impulse traversing the transmission line. The bottom line is that
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> I'm not sure why you would believe that a coil of coax would act like
> a 'transformer' of any type, unless the SWR is truly enormous, a
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> and in large phased array radars (some of which operate in the UHF
> range) employ multiple feeder coax transmission lines that are cut the
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> required physical run length being coiled up somewhere in the system.
> There is no net significant electrical effect on the cable's
> transmission characterists in either case.
>
> Prior to completing my degree work at Drexel, I spent 8-years
> installing and maintaining broadcast transmission systems ranging from
> 5-Kw to 50-Kw. This included 5 years as chief engineer in one station
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> Philly. (Additional work in 4 or 5 smaller stations.)
>
> Quite honestly, I can't remember a single one of these that did not
> protect their very costly antenna installations, transmitters, and
> on-air reliability without lightning chokes employed in their
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> him he took an evidently direct lightning hit on his 40-some foot
> crank up tower holding a 2M beam that was attached to his house. He
> had grounded the outer shield of the RG-8U coax at the based of the

> tower, but without a lightning choke in the coax, the hit simply
> vaporized the majority of his RG-8U, his grounding connection, and
> most of the final tank circuit in his rig in the basement! Not a
> pretty sight!
>
> Realize that a commercial radio broadcaster has to survive episodes
> like this without disruption of their operations. Hams don't. Still
> the emulation of the broadcaster's time proven protection techniques
> involves only a small additional cost to an otherwise excellent
> installation.
>
> For more information, see:
>
> Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company,
> New York. (My issue carries a 1952 copyright, still it's an 'oldie but
> a goodie' with many subsequent editions -- and AFAIK is still the
> bible of the broadcasting industry.)
>
> IIRC, early editions of the ARRL Handbook also described this
> protection technique (likely pre-1970) in the days when most hams
> built their own rigs.
>
> Harry C.
>
> p.s., Jack, I'd love to hear a citation where "it is specifically
> warned against", and why.

1634. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 04:53:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b99jh0pjdn99sjll4hph35qp0lnfjv1s4v@4ax.com>
Source record: 91155

On Wed, 11 Aug 2004 02:59:03 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Tome the loop is a prime example
>in that it produces
> not only more gain per unit length but also has an additive vector
>radiation in a similar way
> centrifugal forces add a vector even tho the electrons
>have a constant speed. It does not take a rocket scientist to visualise that
>an antenna
> with a figure 8 circuit would change the radiation field.(clockwise +
>counterclockwise radiation)

Hi Art,

And don't forget, it was 16 or 17 dB less efficient than the common
antenna.

73's
Richard Clark, KB7QHC

1635. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 05:00:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <nJhSc.284044$Oq2.41126@attbi_s52>
Source record: 91156

Dqavid just to clear some things up with reference to "gain"
There is no energy created or destroyed here, all I am doing with this
design is "flattening"
the 3D pattern that you see when you have a vertical whip style antenna.
Thus the radiation can be "pushed"
to augment the usefull existing gain on the horizon whether it
remains purely omni-directional or slightly directional..
I suppose that this can be seen as the various loops in the column have a
redirectiive effect on
high angle radiation emanating from the lower coils,
I'm off to bed
Cheers and beers
Art
"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:XXfSc.241290$IQ4.147543@attbi_s02...
> David
> Idid describe an antenna that will do all the things that the new patent
> claims and
> it would not surprise me i9n the least if it turns out to be of the same
>snip968$%_6.185742@attbi_s01>,
> > aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
> >
> > >Yes, that does seem a reasonable aproach if you want to use the antenna
> that
> > >you describe.
> >
> > >It does give me thought about the new revolutionary antenna and the
> impact
> > >it will have on radio.
> >
> > On reading your comments, Art, my feeling is that you've swallowed the
> > glowing claims in the original press releases hook, line, and sinker,
> > and as a result you are greatly over-estimating the likely impact of
> > this "revolutionary" technology.
> snip
>
>

1636. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 05:10:13 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <WShSc.12186$Yf6.1885@lakeread03>
Source record: 91157
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

"Harry Conover" <hhc314@yahoo.com> wrote in message
news:7ce4e226.0408101417.a9421d5@posting.google.com...
> "Jack Painter" <223bthp@cox.net> wrote in message
news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> > "Harry Conover" <hhc314@yahoo.com> wrote
> > > radio-operator@telus.net (Private) wrote in message
> > news:<d318809e.0408081853.5e06781a@posting.google.com>...
>
> > >
> > > What I did note missing was the mention of 'lightning chokes' wound in
> > > the coax lines decending from the tower. These are basic to lightning
> > > protection for broadcasting towers, but I've rarely seen them
> > > implemented by hams.
> > >
> > > The idea of a lightning choke is to add a small amount of inductance
> > > to the coax so that if a direct lighting strike happens, the
> > > instantaneous current flowing though the outer jacked of the coax into
> > > your lightning arresters will at least have some amount of impedance
> > > limiting the current magnitude, thus reducing the probability of
> > > destruction of both the coax and the the arrester itself.
> > >
> > > These chokes are more often than not implemented by winding a dozen or
> > > more turns of coax around a form (say a 4" diameter phenolic tube)
> > > prior to the arrester or spark gap.
> > >
> > > Harry C.
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> > Harry, that winding of coax may be useful as an RF choke, but it is most
> > certainly not a lightning choke, and will act more like an air-wound
> > transformer than anything else. Not only is this not specified for any
> > lightning protection systems, it is specifically warned against in many.
>
> > Jack Painter
> > Virginia Beach VA
>
> Jack, while I'm sure that you believe this, I really can't guess where
> you obtained such IMHO such massive misinformation.

Hi Harry - well, the web is FULL of massive information, and the old trick
of coiling coax for lightning protection is simply not specified any longer.
I will look up the sites which warned against it, citing amplification of
EMI by such a manuever, and get back to you.

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> First of all, it is the purpose the the coiled coax to act as an
> inductor (r.f. choke) because this is how it resists the very rapid
> di/dt common mode characteristic associated with a lightning hit, thus
> limiting the peak discharge energy that the following spark-gaps and
> lightning suppessors must absorb and reducing the overall peak impulse
> power damage potential.

Arrestors AND shield grounding are specified at the TOP and BOTTOM of the towers, and AGAIN at the facility entrance. No coils are shown in modern drawings of lightning protection, and I have and reviewed those of one the largest communication companies in the US.

Realistically, such a coil never had any chance of slowing down a 8us/20us or faster attachment of 100,000,000v or even a fraction of that in the smallest of strikes. Coax can only carry 4,500v before the dialectric breaks down and then your SWR and balanced currents are no longer part of the playing field. At about 5,500v the coax can no longer carry the energy by itself and will arc over to anything nearby. So diverting 99.9% of the energy via a fast acting suppressor and shield grounding is the only hope for coax which does in fact take an attachment. Most times the coax does NOT receive the direct attachment! So after shield grounding and arrestor connection, the coiling isn't necessary in the first place, would do no good, and can most certainly act as an air wound transformer to EMI if "wrapped in a dozen or more turns" as you said. Even one turn. Fortunately, coax is "resonant" (used only as an example for high-velocity and low impedance) to a fairly small portion of the DC and AC component of a direct attachment. Not so to the EMI near field, which any wire regardless of it's velocity or impedance will be subject to inductive coupling of EMI. The coax shield will absorb most of that EMI, and unless it exceeds 4500v (very possible in a 50 percentile strike) will be diverted harmlessly to any nearby shield ground. 12 turns of the coax shield - you do the math as you are an electrical engineering expert here - what's the voltage out from 4000v in? Yikes.

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> It's basically a brute-force version of the common computer technique
> of placing a ferrite torroid around cables to attenuate their common
> mode impulse transmission/conduction ability. Realize that with
> sufficiently low SWR, currents through both the inner conductor and
> outer shield of a coax are equal, summing to zero, hence there is no
> net electromagnetic field produced. The same is not true for a common
> mode impulse traversing the transmission line. The bottom line is that
> only the common mode impulse resulting from a lightning strike will
> experience the results of the "choke".
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> a 'transformer' of any type, unless the SWR is truly enormous, a
> probem in itself. A case in point is that in both proton synchrotrons
> (typically operating in a swept frequency range of roughly 3-30 Mhz),
> and in large phased array radars (some of which operate in the UHF
> range) employ multiple feeder coax transmission lines that are cut the

> the same electrical length, with the cable lengths in excess of the
> required physical run length being coiled up somewhere in the system.
> There is no net significant electrical effect on the cable's
> transmission characterists in either case.
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> Prior to completing my degree work at Drexel, I spent 8-years
> installing and maintaining broadcast transmission systems ranging from
> 5-Kw to 50-Kw. This included 5 years as chief engineer in one station
> (WBUD in Trenton, NJ) plus part-time work for WFIL, WCAU, and KYW in
> Philly. (Additional work in 4 or 5 smaller stations.)
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> Quite honestly, I can't remember a single one of these that did not
> protect their very costly antenna installations, transmitters, and
> on-air reliability without lightning chokes employed in their
> transmission lines. Still, these broadcasters use equipment that, in
> general, nothing more sophisticated than your average ham station, but
> on steroids! True, the average AM broadcasting tower usually exceeds
> 200-feet, but in an intense lightning storm, a 40-foot ham tower is
> fully capable of experiencing the same energy lightning hit!
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> I purchased my first ham receiver, an SX-71 from a ham named Bob
> Rutkowski (sp?) in Trenton, NJ. A day or so before I picked it up from
> him he took an evidently direct lightning hit on his 40-some foot
> crank up tower holding a 2M beam that was attached to his house. He
> had grounded the outer shield of the RG-8U coax at the based of the
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> For more information, see:
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> Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company,
> New York. (My issue carries a 1952 copyright, still it's an 'oldie but
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> IIRC, early editions of the ARRL Handbook also described this
> protection technique (likely pre-1970) in the days when most hams
> built their own rigs.
>
> Harry C.
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> p.s., Jack, I'd love to hear a citation where "it is specifically

> warned against", and why.

You will Harry!

Best regards,

Jack

1637. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 05:20:20 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <o0iSc.12187$Yf6.4113@lakeread03>
Source record: 91158

"Harry Conover" <hhc314@yahoo.com> wrote in message
news:7ce4e226.0408101417.a9421d5@posting.google.com...
> "Jack Painter" <223bthp@cox.net> wrote in message
news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> > "Harry Conover" <hhc314@yahoo.com> wrote
> > > radio-operator@telus.net (Private) wrote in message
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> > > What I did note missing was the mention of 'lightning chokes' wound in
> > > the coax lines decending from the tower. These are basic to lightning
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> > > The idea of a lightning choke is to add a small amount of inductance
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> you obtained such IMHO such massive misinformation.

(sorry if this posts twice - my ISP has newsgroup problems)

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> (typically operating in a swept frequency range of roughly 3-30 Mhz),
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> transmission characterists in either case.
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> (WBUD in Trenton, NJ) plus part-time work for WFIL, WCAU, and KYW in
> Philly. (Additional work in 4 or 5 smaller stations.)
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> Quite honestly, I can't remember a single one of these that did not
> protect their very costly antenna installations, transmitters, and
> on-air reliability without lightning chokes employed in their
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> p.s., Jack, I'd love to hear a citation where "it is specifically

> warned against", and why.

You will Harry!

Best regards,

Jack

1638. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 05:24:55 UTC
From: dplatt@radagast.org
Message-ID: <10hjbd7odd674f@corp.supernews.com>
Source record: 91159

In article <XXfSc.241290$IQ4.147543@attbi_s02>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

>David

>Idid describe an antenna that will do all the things that the new patent
>claims and it would not surprise me i9n the least if it turns out to be of the same
>design.

Art,

You've _talked_ about an antenna design which you claim does these
things. You have never, as far as I have seen, "described" it clearly
enough for anyone to actually draw a picture of it that you were
willing to agree was accurate, despite having been asked for this
detail a number of times.

Until you actually demonstrate it (so that it can be subjected to
unbiased tests), or succeed in describing it clearly and accurately
enough that someone else can reproduce it and test the reproduction.

Until you do one or the other, I'm afraid that I have no confidence
that your design does what you say it does, or works the way you say
that it works.

Sorry, guy. On this, I'm "from Missouri"... I say "show me!"

>Now David I know hams do not like to pursue the idea of maxcimum radiation
>per unit length but
>if you have a computor program that can use variable dimensions to meet
>specs then I have provided
>enough info for those that are interested

I disagree, Art. Every discussion or description I've seen you write
has been fuzzy, contradictory, unclear, etc.

> but I suspect that most are
>inately lazy and prefer to0 await the unveiling
>at the end of this month.

I don't buy it, Art. I've tried pretty hard to make sense of what
you've written, and have gotten nowhere at all.

> By the way in the description of the multi loop I
>made no reference to use of
>clockwise and counter clockwise travel a statistic that is very important as
>is the center pole.

So, you've "provided enough info for those that are interested" but
have made no reference to two factors that are "very important"?

>Am I sold on the idea of a different aproach to antennas, you bet I am as
>this aproach provides a
>flattening of the take off angle on the horizon at the expense of higher
>angle radiation which for cell type frequency
>is wasted energy

Fine. Show us.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1639. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 06:00:31 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <4CiSc.12190$Yf6.6920@lakeread03>
Source record: 91160
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

"Harry Conover" <hhc314@yahoo.com> wrote in message
news:7ce4e226.0408101417.a9421d5@posting.google.com...
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news:<r4_Rc.12079$Yf6.1279@lakeread03>...
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> transmission lines. Still, these broadcasters use equipment that, in
> general, nothing more sophisticated than your average ham station, but
> on steroids! True, the average AM broadcasting tower usually exceeds
> 200-feet, but in an intense lightning storm, a 40-foot ham tower is
> fully capable of experiencing the same energy lightning hit!
>
> I purchased my first ham receiver, an SX-71 from a ham named Bob
> Rutkowski (sp?) in Trenton, NJ. A day or so before I picked it up from
> him he took an evidently direct lightning hit on his 40-some foot
> crank up tower holding a 2M beam that was attached to his house. He
> had grounded the outer shield of the RG-8U coax at the based of the
> tower, but without a lightning choke in the coax, the hit simply
> vaporized the majority of his RG-8U, his grounding connection, and
> most of the final tank circuit in his rig in the basement! Not a
> pretty sight!
>
> Realize that a commercial radio broadcaster has to survive episodes
> like this without disruption of their operations. Hams don't. Still
> the emulation of the broadcaster's time proven protection techniques
> involves only a small additional cost to an otherwise excellent
> installation.
>
> For more information, see:
>
> Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company,
> New York. (My issue carries a 1952 copyright, still it's an 'oldie but
> a goodie' with many subsequent editions -- and AFAIK is still the
> bible of the broadcasting industry.)
>
> IIRC, early editions of the ARRL Handbook also described this
> protection technique (likely pre-1970) in the days when most hams
> built their own rigs.
>
> Harry C.
>
> p.s., Jack, I'd love to hear a citation where "it is specifically

> warned against", and why.

You will Harry!

Best regards,

Jack

1640. Re: Grounding tower & shack

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 06:07:51 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ZIiSc.12191$Yf6.6822@lakeread03>
Source record: 91161

"Harry Conover" <hhc314@yahoo.com> wrote in message
news:7ce4e226.0408101417.a9421d5@posting.google.com...
> "Jack Painter" <223bthp@cox.net> wrote in message
news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> > "Harry Conover" <hhc314@yahoo.com> wrote
> > > radio-operator@telus.net (Private) wrote in message
> > news:<d318809e.0408081853.5e06781a@posting.google.com>...
>
> > >
> > > What I did note missing was the mention of 'lightning chokes' wound in
> > > the coax lines decending from the tower. These are basic to lightning
> > > protection for broadcasting towers, but I've rarely seen them
> > > implemented by hams.
> > >
> > > The idea of a lightning choke is to add a small amount of inductance
> > > to the coax so that if a direct lighting strike happens, the
> > > instantaneous current flowing though the outer jacked of the coax into
> > > your lightning arresters will at least have some amount of impedance
> > > limiting the current magnitude, thus reducing the probability of
> > > destruction of both the coax and the the arrester itself.
> > >
> > > These chokes are more often than not implemented by winding a dozen or
> > > more turns of coax around a form (say a 4" diameter phenolic tube)
> > > prior to the arrester or spark gap.
> > >
> > > Harry C.
> >
> > Harry, that winding of coax may be useful as an RF choke, but it is most
> > certainly not a lightning choke, and will act more like an air-wound
> > transformer than anything else. Not only is this not specified for any
> > lightning protection systems, it is specifically warned against in many.
>
> > Jack Painter
> > Virginia Beach VA
>
> Jack, while I'm sure that you believe this, I really can't guess where
> you obtained such IMHO such massive misinformation.

(sorry of this posts twice, ISP has newsgroup problems)

Hi Harry - well, the web is FULL of massive information, and the old trick
of coiling coax for lightning protection is simply not specified any longer.
I will look up the sites which warned against it, citing amplification of
EMI by such a manuever, and get back to you.

>
> First of all, it is the purpose the the coiled coax to act as an
> inductor (r.f. choke) because this is how it resists the very rapid
> di/dt common mode characteristic associated with a lightning hit, thus
> limiting the peak discharge energy that the following spark-gaps and
> lightning suppessors must absorb and reducing the overall peak impulse
> power damage potential.

Arrestors AND shield grounding are specified at the TOP and BOTTOM of the towers, and AGAIN at the facility entrance. No coils are shown in modern drawings of lightning protection, and I have and reviewed those of one the largest communication companies in the US.

Realistically, such a coil never had any chance of slowing down a 8us/20us or faster attachment of 100,000,000v or even a fraction of that in the smallest of strikes. Coax can only carry 4,500v before the dialectric breaks down and then your SWR and balanced currents are no longer part of the playing field. At about 5,500v the coax can no longer carry the energy by itself and will arc over to anything nearby. So diverting 99.9% of the energy via a fast acting suppressor and shield grounding is the only hope for coax which does in fact take an attachment. Most times the coax does NOT receive the direct attachment! So after shield grounding and arrestor connection, the coiling isn't necessary in the first place, would do no good, and can most certainly act as an air wound transformer to EMI if "wrapped in a dozen or more turns" as you said. Even one turn. Fortunately, coax is "resonant" (used only as an example for high-velocity and low impedance) to a fairly small portion of the DC and AC component of a direct attachment. Not so to the EMI near field, which any wire regardless of it's velocity or impedance will be subject to inductive coupling of EMI. The coax shield will absorb most of that EMI, and unless it exceeds 4500v (very possible in a 50 percentile strike) will be diverted harmlessly to any nearby shield ground. 12 turns of the coax shield - you do the math as you are an electrical engineering expert here - what's the voltage out from 4000v in? Yikes.

>
> It's basically a brute-force version of the common computer technique
> of placing a ferrite torroid around cables to attenuate their common
> mode impulse transmission/conduction ability. Realize that with
> sufficiently low SWR, currents through both the inner conductor and
> outer shield of a coax are equal, summing to zero, hence there is no
> net electromagnetic field produced. The same is not true for a common
> mode impulse traversing the transmission line. The bottom line is that
> only the common mode impulse resulting from a lightning strike will
> experience the results of the "choke".
>
> I'm not sure why you would believe that a coil of coax would act like
> a 'transformer' of any type, unless the SWR is truly enormous, a
> probem in itself. A case in point is that in both proton synchrotrons
> (typically operating in a swept frequency range of roughly 3-30 Mhz),
> and in large phased array radars (some of which operate in the UHF
> range) employ multiple feeder coax transmission lines that are cut the

> the same electrical length, with the cable lengths in excess of the
> required physical run length being coiled up somewhere in the system.
> There is no net significant electrical effect on the cable's
> transmission characterists in either case.
>
> Prior to completing my degree work at Drexel, I spent 8-years
> installing and maintaining broadcast transmission systems ranging from
> 5-Kw to 50-Kw. This included 5 years as chief engineer in one station
> (WBUD in Trenton, NJ) plus part-time work for WFIL, WCAU, and KYW in
> Philly. (Additional work in 4 or 5 smaller stations.)
>
> Quite honestly, I can't remember a single one of these that did not
> protect their very costly antenna installations, transmitters, and
> on-air reliability without lightning chokes employed in their
> transmission lines. Still, these broadcasters use equipment that, in
> general, nothing more sophisticated than your average ham station, but
> on steroids! True, the average AM broadcasting tower usually exceeds
> 200-feet, but in an intense lightning storm, a 40-foot ham tower is
> fully capable of experiencing the same energy lightning hit!
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> I purchased my first ham receiver, an SX-71 from a ham named Bob
> Rutkowski (sp?) in Trenton, NJ. A day or so before I picked it up from
> him he took an evidently direct lightning hit on his 40-some foot
> crank up tower holding a 2M beam that was attached to his house. He
> had grounded the outer shield of the RG-8U coax at the based of the
> tower, but without a lightning choke in the coax, the hit simply
> vaporized the majority of his RG-8U, his grounding connection, and
> most of the final tank circuit in his rig in the basement! Not a
> pretty sight!
>
> Realize that a commercial radio broadcaster has to survive episodes
> like this without disruption of their operations. Hams don't. Still
> the emulation of the broadcaster's time proven protection techniques
> involves only a small additional cost to an otherwise excellent
> installation.
>
> For more information, see:
>
> Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company,
> New York. (My issue carries a 1952 copyright, still it's an 'oldie but
> a goodie' with many subsequent editions -- and AFAIK is still the
> bible of the broadcasting industry.)
>
> IIRC, early editions of the ARRL Handbook also described this
> protection technique (likely pre-1970) in the days when most hams
> built their own rigs.
>
> Harry C.
>
> p.s., Jack, I'd love to hear a citation where "it is specifically

> warned against", and why.

You will Harry!

Best regards,

Jack

1641. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 06:10:58 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <SLiSc.12192$Yf6.10600@lakeread03>
Source record: 91162
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

You have a great installation - and adding a few ground rods and shield grounds will top it off. Stay tuned for the looping coax fiasco finale....

Jack

"Private" <radio-operator@telus.net> wrote in message news:d318809e.0408102020.75d30c2f@posting.google.com...
> Thank-you for the advice to this point. I think I will invest in the
> rotator cable ground. Not sure what to do about the lightning choke.
>
> I don't mind replacing the antenna/mast if I receive a direct
> lightning hit, I just dont want to turn be fried to a crisp.....
>
> Lloyd
>
>
> hhc314@yahoo.com (Harry Conover) wrote in message news:<7ce4e226.0408101417.a9421d5@posting.google.com>...
> > "Jack Painter" <223bthp@cox.net> wrote in message news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> > > "Harry Conover" <hhc314@yahoo.com> wrote
> > > > radio-operator@telus.net (Private) wrote in message
> > > news:<d318809e.0408081853.5e06781a@posting.google.com>...
> >
> > > > >
> > > > What I did note missing was the mention of 'lightning chokes' wound in
> > > > the coax lines decending from the tower. These are basic to lightning
> > > > protection for broadcasting towers, but I've rarely seen them
> > > > implemented by hams.
> > > >
> > > > The idea of a lightning choke is to add a small amount of inductance
> > > > to the coax so that if a direct lighting strike happens, the
> > > > instantaneous current flowing though the outer jacked of the coax into
> > > > your lightning arresters will at least have some amount of impedance
> > > > limiting the current magnitude, thus reducing the probability of
> > > > destruction of both the coax and the the arrester itself.
> > > >
> > > > These chokes are more often than not implemented by winding a dozen or
> > > > more turns of coax around a form (say a 4" diameter phenolic tube)
> > > > prior to the arrester or spark gap.

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> > > > Harry C.
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> > > certainly not a lightning choke, and will act more like an air-wound
> > > transformer than anything else. Not only is this not specified for any
> > > lightning protection systems, it is specifically warned against in
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> > > Virginia Beach VA
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> > you obtained such IMHO such massive misinformation.
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> > First of all, it is the purpose the the coiled coax to act as an
> > inductor (r.f. choke) because this is how it resists the very rapid
> > di/dt common mode characteristic associated with a lightning hit, thus
> > limiting the peak discharge energy that the following spark-gaps and
> > lightning suppessors must absorb and reducing the overall peak impulse
> > power damage potential.
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> > It's basically a brute-force version of the common computer technique
> > of placing a ferrite torroid around cables to attenuate their common
> > mode impulse transmission/conduction ability. Realize that with
> > sufficiently low SWR, currents through both the inner conductor and
> > outer shield of a coax are equal, summing to zero, hence there is no
> > net electromagnetic field produced. The same is not true for a common
> > mode impulse traversing the transmission line. The bottom line is that
> > only the common mode impulse resulting from a lightning strike will
> > experience the results of the "choke".
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> > a 'transformer' of any type, unless the SWR is truly enormous, a
> > probem in itself. A case in point is that in both proton synchrotrons
> > (typically operating in a swept frequency range of roughly 3-30 Mhz),
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> > 5-Kw to 50-Kw. This included 5 years as chief engineer in one station
> > (WBUD in Trenton, NJ) plus part-time work for WFIL, WCAU, and KYW in
> > Philly. (Additional work in 4 or 5 smaller stations.)
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> > Quite honestly, I can't remember a single one of these that did not
> > protect their very costly antenna installations, transmitters, and
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> > For more information, see:
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> > Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company,
> > New York. (My issue carries a 1952 copyright, still it's an 'oldie but
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> > bible of the broadcasting industry.)
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> > IIRC, early editions of the ARRL Handbook also described this
> > protection technique (likely pre-1970) in the days when most hams
> > built their own rigs.
> >
> > Harry C.
> >
> > p.s., Jack, I'd love to hear a citation where "it is specifically
> > warned against", and why.

1642. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 12:32:28 UTC
From: "aunwin@insightbb.com"
Message-ID: <wloSc.130290$eM2.80708@attbi_s51>
Source record: 91163

David I feel sure that the new design is what I have described and we will know in a few weeks.
But do yourself a favour and roughly model the following
which is not a final design.
Create a closed loop and divide it into 20 segments
and then cut it in half to make the program shorter.
You then place these haf loops at varying heights with a matter of inches between them. When they are connected
together starting from the ground the resulting patter will be a cloud warmer with high gain. This does not take long to do and if you scan frequencies you qill find the pattern change interesting. If you then become interest then connect the half loops instead of 1,2,3 vertically move the fthird loop to position one and so forth plus connect them so that you have both clockwise and counter clockwise
radiation, you will then see a flattening of radiation to the horizon.
Enough said, I am not interested in a verbal snotty battle which will surely happen now that Richard has entered the thread. If the new patent does not follow the scheme of things outlined then I will supply to you
a model and a picture of an actual antenna. So let us await the release of details of this new' revolutionary' antenna which I am sure that Chip will supply.
Cheers
Art

"Dave Platt" <dplatt@radagast.org> wrote in message news:10hjbd7odd674f@corp.supernews.com...
> In article <XXfSc.241290$IQ4.147543@attbi_s02>,
> aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:
>
> >David
>
> >Idid describe an antenna that will do all the things that the new patent
> >claims and it would not surprise me i9n the least if it turns out to be of the same
> >design.
>
> Art,
>
> You've _talked_ about an antenna design which you claim does these
> things. You have never, as far as I have seen, "described" it clearly
> enough for anyone to actually draw a picture of it that you were
> willing to agree was accurate, despite having been asked for this
> detail a number of times.

>
> Until you actually demonstrate it (so that it can be subjected to
> unbiased tests), or succeed in describing it clearly and accurately
> enough that someone else can reproduce it and test the reproduction.
>
> Until you do one or the other, I'm afraid that I have no confidence
> that your design does what you say it does, or works the way you say
> that it works.
>
> Sorry, guy. On this, I'm "from Missouri"... I say "show me!"
>
> >Now David I know hams do not like to pursue the idea of maxcimum
radiation
> >per unit length but
> >if you have a computor program that can use variable dimensions to meet
> >specs then I have provided
> >enough info for those that are interested
>
> I disagree, Art. Every discussion or description I've seen you write
> has been fuzzy, contradictory, unclear, etc.
>
> > but I suspect that most are
> >inately lazy and prefer to0 await the unveiling
> >at the end of this month.
>
> I don't buy it, Art. I've tried pretty hard to make sense of what
> you've written, and have gotten nowhere at all.
>
> > By the way in the description of the multi loop I
> >made no reference to use of
> >clockwise and counter clockwise travel a statistic that is very important
as
> >is the center pole.
>
> So, you've "provided enough info for those that are interested" but
> have made no reference to two factors that are "very important"?
>
> >Am I sold on the idea of a different aproach to antennas, you bet I am as
> >this aproach provides a
> >flattening of the take off angle on the horizon at the expense of higher
> >angle radiation which for cell type frequency
> >is wasted energy
>
> Fine. Show us.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

1643. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 15:31:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ppekh0ljbr3sppvcmo90l14s7ed42qhf6h@4ax.com>
Source record: 91164

On Wed, 11 Aug 2004 12:32:28 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

> I am not interested in a verbal snotty battle which will surely
>happen now that Richard has entered the thread.

Hi Art,

I merely pointed out your antenna shows 17dB loss compared to the
standard antenna. Sorry if that rains on your parade.

73's
Richard Clark, KB7QHC

1644. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 17:44:25 UTC
From: Starr <thick.as@plank.net>
Message-ID: <cfdltr$54r$0@pita.alt.net>
Source record: 91165
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

```
Frank Turner-Smith G3VKI wrote:
> "Starr" <thick.as@plank.net> wrote in message
> news:cf8car$mo0$0@pita.alt.net...
>> Frank Turner-Smith G3VKI wrote:
>>> "Starr" <thick.as@plank.net> wrote in message
>>> news:cf5eb0$31r$0@pita.alt.net...
>>>>
>>>>
>>>> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in
>>>> message news:2nl3bbF21i9hU1@uni-berlin.de...
>>>>> "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
>>>>> news:2njlieF1efb1U1@uni-berlin.de...
>>>>>> SWR - Succulent With Ratatouille.
>>>>>>
>>>>> A - Arrogant
>>>>> I - Ignorant
>>>>> R - Rude
>>>>> Y - Yob
>>>>>
>>>>> R - Ridiculous
>>>>>
>>>>> B - Bullshit
>>>>> E - Excrement
>>>>> A - Anal
>>>>> N - Nasty
>>>>>
>>>>> ...(_!_)...
>>>>>
>>>>>
>>>> Beany can be a huge arsehole at times...
>>>
>>> That's why he's known as The Anus
>>>
>>> ... but now you are attacking him on
>>>> inoffensive remarks.
>>>> Not good.
>>>>
>>> Bean is an open target - he has no human rights since he is not
>>> human.
>>
>> Oh i'm not worried about him, I'm worried for you. It's starting to
>> become an obession. Just ignore the tosser.
>>
```

> Thanks, but I've got a life outside this NG. Anus baiting is just an
> 'after a few beers' pursuit.
so have I but you don't see me baiting him for a harmless remark as rare as
they are.
--
S
--
I live my life like I play games, I cheat.
-
Trolls are your enemies, wipe them out.
http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
-

1645. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 21:16:09 UTC
From: Frank Turner-Smith G3VKI <g3vki@turner-smith.co.uk>
Message-ID: <2nvgkkF595djU2@uni-berlin.de>
Source record: 91166
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

"Starr" <thick.as@plank.net> wrote in message
news:cfdltr$54r$0@pita.alt.net...
> Frank Turner-Smith G3VKI wrote:
> > "Starr" <thick.as@plank.net> wrote in message
> > news:cf8car$mo0$0@pita.alt.net...
> >> Frank Turner-Smith G3VKI wrote:
> >>> "Starr" <thick.as@plank.net> wrote in message
> >>> news:cf5eb0$31r$0@pita.alt.net...
> >>>>
> >>>>
> >>>> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in
> >>>> message news:2nl3bbF21i9hU1@uni-berlin.de...
> >>>>> "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
> >>>>> news:2njlieF1efb1U1@uni-berlin.de...
> >>>>>> SWR - Succulent With Ratatouille.
> >>>>>>
> >>>>> A - Arrogant
> >>>>> I - Ignorant
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> >>>>> A - Anal
> >>>>> N - Nasty
> >>>>>
> >>>>> ...(_!_)...
> >>>>>
> >>>>>
> >>>> Beany can be a huge arsehole at times...
> >>>
> >>> That's why he's known as The Anus
> >>>
> >>> ... but now you are attacking him on
> >>> inoffensive remarks.
> >>> Not good.
> >>>
> >>> Bean is an open target - he has no human rights since he is not
> >>> human.
> >>
> >> Oh i'm not worried about him, I'm worried for you. It's starting to

> >> become an obession. Just ignore the tosser.
> >>
> > Thanks, but I've got a life outside this NG. Anus baiting is just an
> > 'after a few beers' pursuit.
> so have I but you don't see me baiting him for a harmless remark as rare
as
> they are.

Just keeping in practice.
--
;>)
73 de Frank Turner-Smith G3VKI - mine's a pint.
http://turner-smith.co.uk

1646. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 21:56:19 UTC
From: Dan/W4NTI <w4nti@get>
Message-ID: <7CwSc.21722$Jp6.11918@newsread3.news.atl.earthlink.net>
Source record: 91167

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040810181801.07086.00000780@mb-m17.aol.com...
> >Excuse me Gary. I don't bother with a computer (GIGO) program to teach
me
> >what I learned by experience.
>
> What makes you think I am talking about a modeling program? I have been
> playing with antennas for 45 years. I can work my way through EZNEC, and
I had
> to learn that also.
> Maybe you should spend some quality time with a good modeling program. I
think
> you will find the results agree with that vast amount of practical
experience
> you have.
> 73 Gary N4AST

I just assumed.....why should I spend all that 'quality time' on a modeling
program? If it will confirm what I know, or can find, in a decent antenna
book??

Dan/W4NTI

1647. Cushcraft MA-5B matching problem

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 22:53:44 UTC
From: "news.dcsi.net" <pita@outrageous.net>
Message-ID: <411aa24d_4@corp.newsgroups.com>
Source record: 91168

A ham friend bought this antenna. I checked his match with the antenna on the ground reflector down on plastic sawhorses 2 feet above ground and the director pointed to the sky. 10 and 15m matched just fine. 12 and 17 were ok but 20m was way out of match. We reduced the 1st and 3d element tips to 7 inches and have a good match at 14.100 but in the phone portion around 14.250 the match was 4.6:1. When at 8 inches the match was over 6. Does anyone have any experience with this antenna? I want to be cautious about cutting the tip portions of ele 1 and 3 so I can shorten the elements more and hopefully bring the antenna into proper swr range. The band width on 20 is only 90 kHz. Any help or comments would be helpful. BTW Cushcraft has not yet answered any of his calls.
tnx donald wk6q

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1648. Re: 40 meter detla loop radation angle

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-11 23:43:46 UTC
From: jgboyles@aol.com
Message-ID: <20040811194346.06859.00002968@mb-m13.aol.com>
Source record: 91169

>I just assumed.....why should I spend all that 'quality time' on a modeling
>program

Just going on what I have done, it is really interesting to model antennas
that I have have actually built, and see if the results agree with the model.
Mostly they do.
I have found that it is easier to model an antipacited design, and go through
the various iterations to see how it pans out.
It has been 4 years since I have built an antenna without modeling first
Antennas are fun, and cheap, at least wire is cheap
73 Gary N4AST

1649. cancel <cf3ch7$b4s$1@news.xmission.com>

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 00:03:07 UTC
From: psmith@xmission.com
Message-ID: <cfec3o$v7a$1@news.xmission.com>
Source record: 91170

```
This message was cancelled from within Mozilla.
```

1650. Re: Cushcraft MA-5B matching problem

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 01:13:55 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <dbglh0pb13cemk9ossl6ubu5au9j2mglsa@4ax.com>
Source record: 91071

On Wed, 11 Aug 2004 15:53:44 -0700, "news.dcsi.net"
<pita@outrageous.net> wrote:

>A ham friend bought this antenna. I checked his match with the antenna on
>the ground reflector down on plastic sawhorses 2 feet above ground and the
>director pointed to the sky. 10 and 15m matched just fine. 12 and 17 were ok
>but 20m was way out of match. We reduced the 1st and 3d element tips to 7
>inches and have a good match at 14.100 but in the phone portion around
>14.250 the match was 4.6:1. When at 8 inches the match was over 6. Does
>anyone have any experience with this antenna? I want to be cautious about
>cutting the tip portions of ele 1 and 3 so I can shorten the elements more
>and hopefully bring the antenna into proper swr range. The band width on 20
>is only 90 kHz. Any help or comments would be helpful. BTW Cushcraft has not
>yet answered any of his calls.
>tnx donald wk6q
>
>
>
>
>-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>-----== Over 100,000 Newsgroups - 19 Different Servers! =-----
I suggest that before doing any more trimming that you do everything
possible to get this antenna higher up from the ground to take
readings and make adjustments. You may want to also keep the antenna
in the same orientation as it will be when installed. There may well
be other things in play with your antenna - but these two changes in
your process may help, it has for me in the past; I learned the hard
way and had to un-install the antennas from the roof & used a
temporary mast in the center of the backyard to 'tune & prune.'

Hope this helps,
Howard ke6mak

1651. Re: 300 ohm underground feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 01:59:15 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <w9ASc.796$hz.608@bignews5.bellsouth.net>
Source record: 91072

I remember something about that - now that you mention it - but there was
some drawback other than price - I think it was lossy - but I may be in
error - going by memory
I once had a good memory - but forget where I left it.

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:u86dnR_B54QOB4TcRVn-ow@comcast.com...
>
> "Steve Beyers" <sjbeyers@trianglenet.net> wrote in message
> news:72befaab.0408100341.406d5335@posting.google.com...
> > In the past, I've seen several references here to feedlines consisting
> > of 300-ohm transmitting-type twin lead buried in PVC pipe. Does
> > anyone have any suggestions on what size pipe to use, and how to keep
> > the line centered in the pipe?
> >
> > Steve W9HJW
>
> They used to make shielded 300 Ohm line. You could run that through
> anything, so long as it is dry.
>
> Tam/WB2TT
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1652. Re: mis-matched stacks

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 02:10:26 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <411ad192$0$74193$39cecf19@news.twtelecom.net>
Source record: 91073

Here are the designs I said I'd send if requested. Bob requested, and I sent them to him via email. I am copying the email here with a little bit of editing, since I sent him 2 emails.

Here is the 4 element version. This one was designed to be stacked with 12 foot spacing, but still works fine as a single. The only thing that suffers is the rear end of the pattern gets the "butt cheeks" above 50.2 when not stacked.

The first column is the position on the boom, and the second is the 5/8's section length. The 3/4" center piece is still 48".

0.0000 35.4375
39.3750 34.1250
84.3750 31.1250
142.0000 29.2500

And here is the 5 element version, still on a 12 foot boom. This has never been built, but I've built enough of these from the YO models to know it should be just fine.

0.0000 35.8125
21.2500 34.1875
42.5000 31.0625
86.5000 30.5625
142.0000 29.6875

With both of these, matching is your own business. Impedance of each is roughly 17-j13. The A5 design shows about 32-j13, so you will certainly have to change the gamma arm length, but the capacitance close to the original. Worse comes to worse, drop me another note, and I'll send you the homebrew gamma design I have that matches easily.

The 5 element version has .2dB additional gain from the added element's weight.

tom

---

tom
K0TAR

rjhall wrote:

> Greetings,
>
> For 6-Meter work I have a Cushcraft 5-el beam.
>
> I just came into possesion of an MFJ 3-el 6M beam. Not what I would
> chose if I was doing it on purpose, but since I have it I am wondering:
>
> Is there any advantage (or disadvantage) to stacking these two antennas?
>
> If not, maybe I'll mount the MFJ vertical for occasional FM work.
>
> 73
>
> Bob, KC2MHU

1653. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 03:01:30 UTC
From: richardharrison@webtv.net
Message-ID: <15797-411ADD8A-9@storefull-3255.bay.webtv.net>
Source record: 91074

Dr. Slick wrote:
"I`d like some advice on building the phasing harness required for the following antenna,"

The antenna described has one-wavelength spacing between antenna elements. As velocity in the coax is only about 2/3 that in free space, one-wavelength of phase delay in cable won`t stretch between the antenna bays as shown. Solution is to add another wavelength of phase shift to the interconnection cable or to simply use a pair of identical cables of almost any length to parallel the bays at a driving point. Any desired phase delay can be added to one or the other of the cables to shape the pattern.

Best regards, Richard Harrison, KB5WZI

1654. Re: Sausage Co-Linear

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 05:24:34 UTC
From: Starr <thick.as@plank.net>
Message-ID: <cfeuuk$k72$0@pita.alt.net>
Source record: 91075
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

```
Frank Turner-Smith G3VKI wrote:
> "Starr" <thick.as@plank.net> wrote in message
> news:cfdltr$54r$0@pita.alt.net...
>> Frank Turner-Smith G3VKI wrote:
>>> "Starr" <thick.as@plank.net> wrote in message
>>> news:cf8car$mo0$0@pita.alt.net...
>>>> Frank Turner-Smith G3VKI wrote:
>>>>> "Starr" <thick.as@plank.net> wrote in message
>>>>> news:cf5eb0$31r$0@pita.alt.net...
>>>>>
>>>>>
>>>>>> "Frank Turner-Smith G3VKI" <g3vki@turner-smith.co.uk> wrote in
>>>>>> message news:2nl3bbF21i9hU1@uni-berlin.de...
>>>>>>> "Airy R. Bean, village idiot" <me@privacy.net> wrote in message
>>>>>>> news:2njlieF1efb1U1@uni-berlin.de...
>>>>>>>> SWR - Succulent With Ratatouille.
>>>>>>>
>>>>>>> A - Arrogant
>>>>>>> I - Ignorant
>>>>>>> R - Rude
>>>>>>> Y - Yob
>>>>>>>
>>>>>>> R - Ridiculous
>>>>>>>
>>>>>>> B - Bullshit
>>>>>>> E - Excrement
>>>>>>> A - Anal
>>>>>>> N - Nasty
>>>>>>>
>>>>>>> ...(_!_)...
>>>>>>>
>>>>>>>
>>>>>> Beany can be a huge arsehole at times...
>>>>>
>>>>> That's why he's known as The Anus
>>>>>
>>>>> ... but now you are attacking him on
>>>>>> inoffensive remarks.
>>>>>> Not good.
>>>>>>
>>>>> Bean is an open target - he has no human rights since he is not
>>>>> human.
>>>>
```

>>>> Oh i'm not worried about him, I'm worried for you. It's starting to
>>>> become an obession. Just ignore the tosser.
>>>>
>>> Thanks, but I've got a life outside this NG. Anus baiting is just an
>>> 'after a few beers' pursuit.
>> so have I but you don't see me baiting him for a harmless remark as
>> rare as they are.
>
> Just keeping in practice.
yeah well unprovoked attacks are just dull. I expect he'll soon spout his
crap again and when he does fire away. :)
--
S
--
I live my life like I play games, I cheat.
-
Trolls are your enemies, wipe them out.
http://www.hyphenologist.co.uk/killfile/antitrollfaqhtm.htm
-

1655. Signal Strength Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 05:55:57 UTC
From: charasmatic_joker@yahoo.com
Message-ID: <8db044f9.0408112155.3f4ce10e@posting.google.com>
Source record: 91076

This is probably not the right group for this question...but you guys
are the experts on antennas so I thought I would throw my question out
there...
I am in an office building (43rd floor) and I was wondering some tips
on getting television reception to come in clearer? I have a basic
bunny ears antenna but the picture is very fuzzy and fades...this is
almost certainly because of the building. Is there anything I can do
to make the picture come in clearer?
Thanks,
Nickolas

1656. 8 over 8 slot-coupled Yagi-Uda

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 10:19:47 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2o0umqF5116tU1@uni-berlin.de>
Source record: 91077
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna

Two aerials on the roof decided to get married.

The ceremony was nothing to speak of, but the reception was wonderful.

1657. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 14:36:21 UTC
From: King Zulu <KingZulu123@aol.com>
Message-ID: <FfLSc.135425$eM2.65563@attbi_s51>
Source record: 91078
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

"Private" <radio-operator@telus.net> wrote in message
news:d318809e.0408081853.5e06781a@posting.google.com...
> Hello,
>
> I am looking for some advice on if the ground system featured below is
> sufficent or should be upgraded. It consists of:
>
> - 3 ground rods 10' each around the tower (bonded together)

Lightning likes to go straight. Try to have at least one ground rod connected to the tower base at the base; the rod should be directly under the base or as close to touching the base as possible. A 10' ground rod is good if in conductive earth. In sandy Florida, where I tood several hits, it took over a 20' length of ground rod (1/2" steel water pipe) to hit conductive "hard pan". I just washed it in until it hit some solid clay, and then washed it into the clay as far as I could.

> - 2 ground plates (one outside, one in the shack, also bonded
> together)
> - lightning arrestors and/or feedthrough adapters
> - tower to mast ground - interior coax switch (not shown)

The coax switch should be a grounding switch. Floating elements on an antenna could actally attract a lightning hit. Also, for induced hits (not a direct strike, but with enough voltage to damage equipment due to a nearby strike), the grounding of the antenna lines gives the charge a nice safe path to follow. That's better than letting the current find its own path by arcing somewhere. I like to turn off the AC power to my entire equipment setup when not in use. So, with the power switch on the transceiver and the main "shack" ac power switches off, a lightning surge on the power line can only get me or the equipment when I am actually operating. One last suggestion: put a big (3 or 4' diameter) vertical loop (preferably near the ground) in all tower cables going into the house. (Right over your ground plate might be a good place.) The inductance of the loop, and the fact that lighting likes to ionize paths in a more or less straight lines, will keep the main current surge of a direct hit from entering your house and finding its "home" in your power line or telephone line. I survived operating for many years in the lightning belt of Florida and have the burn marks on my mast to prove it. The only known damage in Florida was some induced power that killed a couple of ICs connected to a printer ribbon cable. That was just from the current going down the tower on the outside side of the wall. Lightning protection is still as much art as science, Lloyd - but what you have done so far should fairly well protect folks in the house. If lightning is going to hit, just let it find a nice safe home - and try not to be

operating when it does. HI HI

In Florida, a house one block from us burned to the ground when lightning started a fire in their attic. That couldn't have happened at our house, as the lighting had a 70' tower to hit first, and a 23' ground rod to give the current a safe place to go. We were hit - several times. So, look at your well grounded tower as an asset for true lightning protection - not a liability.

73
ak

1658. Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 14:51:45 UTC
From: krt2054@charter.net
Message-ID: <33d49c4.0408120651.3797cb54@posting.google.com>
Source record: 91079

I have an ICOM-725 (HF system, 100W output) connected to a MFJ tuner and then about 120 foot feedline run to an antenna I made myself.

I can get the SWR on the MFJ tuner to read nearly 1:1, but the transmitter display shows only about a 25% power output.

It occurs to me that the impedence that the tuner is "seeing" is so high that the transmitter simply cannot supply the necessary current, i.e., as with any voltage source that gets swamped.

Make sense, or am I barking up the wrong tree?

Thanks.

Thomas

1659. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 15:08:36 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <CtidnTyTKrxgGobcRVn-uQ@adelphia.com>
Source record: 91080

"Thomas" <krt2054@charter.net> wrote in message
news:33d49c4.0408120651.3797cb54@posting.google.com...
> I have an ICOM-725 (HF system, 100W output) connected to a MFJ tuner
> and then about 120 foot feedline run to an antenna I made myself.
>
> I can get the SWR on the MFJ tuner to read nearly 1:1, but the
> transmitter display shows only about a 25% power output.
>
> It occurs to me that the impedence that the tuner is "seeing" is so
> high that the transmitter simply cannot supply the necessary current,
> i.e., as with any voltage source that gets swamped.
>
> Make sense, or am I barking up the wrong tree?
>
> Thanks.
>
> Thomas

what does your wattmeter read when the transmitter is connected to a 50 ohm
resistive load?

1660. Re: Signal Strength Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 15:15:46 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <7ZqdnS0xhZc2FIbcRVn-ig@adelphia.com>
Source record: 91081

"Nickolas" <charasmatic_joker@yahoo.com> wrote in message
news:8db044f9.0408112155.3f4ce10e@posting.google.com...
> This is probably not the right group for this question...but you guys
> are the experts on antennas so I thought I would throw my question out
> there...
> I am in an office building (43rd floor) and I was wondering some tips
> on getting television reception to come in clearer? I have a basic
> bunny ears antenna but the picture is very fuzzy and fades...this is
> almost certainly because of the building. Is there anything I can do
> to make the picture come in clearer?
> Thanks,
> Nickolas

certainly... install an antenna on the roof and connect to TV.

oh.. i bet you did not want to hear that answer.

try some different things.

move the antennas near a window.

there are gizmos that you can buy which safely couples the antenna input to
the buildings AC wiring.

try an amplified indoor antenna.

1661. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 16:07:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pl3nh0lvi3191rpe14uspq3dt69v4tno78@4ax.com>
Source record: 91082
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

On 10 Aug 2004 21:20:29 -0700, radio-operator@telus.net (Private)
wrote:

>Thank-you for the advice to this point. I think I will invest in the
>rotator cable ground. Not sure what to do about the lightning choke.
>
>I don't mind replacing the antenna/mast if I receive a direct
>lightning hit, I just dont want to turn be fried to a crisp.....
>
>Lloyd

Hi Lloyd,

Of the advice offered, out of the dozen or so comments, only the addition of radials and grounding of peripheral equipment made any sense to your already extensive installation. Adding "more" rods sounds like hail Mary solutions. I would bet almost every house for 10 miles around you survives quite well with one.

Sure, few if any sport towers, but lightning in the vicinity is not so choosy as to miss every house, building, or power pole simply because they are not radio amateurs.

I also note the complete absence of discussion about the Code. All grounds must be bonded (clamped, not screw attachment nor solder/brazed) with a continuous wire (no breaks or splices). I also note some rather bizarre descriptions of how chokes work (and to add that they are not used by Hams is simply ignorance or the choice to illustrate with poor examples).

I would suggest you mine the archives of rec.radio.amateur.antenna for two correspondents: Richard Harrison, KB5WZI for thousands of commercial and amateur tower installations over a career spanning 50 years (you will discover half to two thirds of suggested embellishments are immaterial fluff); and Reg Edwards, G4FGQ for the topic of successful ground rod application (notable in that laying them horizontal is just as good, if not better).

As to your last comment about getting fried. You should examine that illusion and recall that it brings voltage to mind, not current. Voltage comes from two mechanisms common here, impedance and resistance (the lightning strike is considered to be from a constant current generator willing to present any potential necessary to preserve flow). A sharp bend in a conductor is one source of impedance change for the bad - so graceful sweeps are preferred where

you want to change direction. I note the irony of discussion where chokes are used to build voltage (power being equal to Iï¿½E and current being constant guarantees a build up of power beyond what would have been suffered) to guarantee spark discharge elements firing (I suppose so, but this sounds like Advertising Copy to sell spark discharge elements). Most successful solutions offered here for years and years all have the common goal of burying the lightning stroke's current into the soil as soon as possible without any impedance to its path. If you research the archives for low resistance paths of lightning, you will find out how little total power is suffered in a strike (don't fall for the monster under the bed stories of a gazillion volts at a bajillion amps).

73's
Richard Clark, KB7QHC

1662. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 16:46:09 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <l9NSc.10917$EQ5.346@nwrddc03.gnilink.net>
Source record: 91083

Richard

I'm really "out of touch" with what HAMs are doing these days. Is it
clear to you what this array of two CP antennas will be used for?

Jerry

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:15797-411ADD8A-9@storefull-3255.bay.webtv.net...
> Dr. Slick wrote:
> "I`d like some advice on building the phasing harness required for the
> following antenna,"
>
> The antenna described has one-wavelength spacing between antenna
> elements. As velocity in the coax is only about 2/3 that in free space,
> one-wavelength of phase delay in cable won`t stretch between the antenna
> bays as shown. Solution is to add another wavelength of phase shift to
> the interconnection cable or to simply use a pair of identical cables of
> almost any length to parallel the bays at a driving point. Any desired
> phase delay can be added to one or the other of the cables to shape the
> pattern.
>
> Best regards, Richard Harrison, KB5WZI
>

1663. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 16:48:26 UTC
From: Red Noise <RN@random.net>
Message-ID: <vbNSc.24034$xk.7043@fed1read01>
Source record: 91084
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Best do a lot of research at PolyPhaser.com URL:
http://www.polyphaser.com/

Engineering notes at URL:
http://www.polyphaser.com/ppc_pen_home.asp

--
Red Noise

1664. Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 16:52:35 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0408120852.56d63832@posting.google.com>
Source record: 91085

Invariably when antenna gain is mentioned
questions arise as to gain measurement and accuracy there of.
I do a lot of antenna experiments and declarations of gain never get
any where.
Ihave now purchased a 27 Mhz electric model airoplane and am now in
the process of making a new design antenna and I intend to measure an
antennas
relative gain my comparing the distance travelled by the model by
usind a standard whip antenna and then by using newly designed
antenna.
I visualise keeping a record of distance travelled of my various
experiment antennas.
Does any body see any negatives about this aproach which will always
be done under zero wind conditions? I am looking for a real world
guide to gain to escape from the gain arguments of today.
Thanks in advance
Art

1665. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 17:13:12 UTC
From: Michael Waldrop <wb8tnj@hotmail.com>
Message-ID: <JyNSc.1062$bv2.329@fe39.usenetserver.com>
Source record: 91086
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Having read the various post concerning coiling the coax to form a "choke", I recall a technical article from "PolyPhaser.com", the lightning product company. Below is an exerpt from the technical document covering Amateur Radio lightning protection and coiling of coax cable to form a choke.

Quote:
(from www.polyphaser.com website)

Document Number PEN1016: An overview of Lightning Protection for Ham Radio Stations

Even though the inductive properties of the coax cable appear to be beneficial, and extra inductance can be created by adding a few turns to the coax; don't do it. The added turns can also act like an air wound transformer coupling more energy into the line. Make sure coax lines leaving the tower remain at right angles to the magnetic field surrounding the tower.

Unquote

It is my belief, based on coils and induced energy into the coil, that coiling of the coax will induce an EMF field that can be picked up by the coax, or other cabling, allowing it to enter into the house/shack or, more simplified, follow a path that is not desired, i.e. the coax or rotor cable run to the shack. Grounding of the coax at the top and bottom of the tower, attaching coax lightning protecting products at the base of the tower and running the remaining coax to the shack through buried metal conduit, greatly reduces the chances of lightning strike energy from entering into the cable(s) leading from the tower. Additionally, each leg of the tower, not just one leg, should be grounded through it's own seperate ground rod and each leg ground should be connected to a circular grounding system, around the tower. The tower grounding system should be further connected to a house grounding system surrounding the house with 8 foot grounding rods driven into the ground and connected to the house grounding system (central point grounding). The tower grounding system along with the house grounding system should be connected together. The distance between the tower and the house/shack can be lengthy. Connect the 2 systems together and add additional 8 foot grounding rods every 16 feet along it's path.

Using buired conduit for coax and rotor cable, for example, greatly reduces the chance of EMF fields from flowing along the coax and into the shack. A direct lightning strike to the tower will generate an EMF magnetic field that can be picked up by coax, rotor and coax switch cables then flow into the house and through the equipment and/or wiring. The tower, during a direct strike, radiate a large EMF magnetic field that can be picked up by

anything within it's path. The strength of the field reduces by a factor of
1, outlined in the Polyphaser.com technical document.

Just some technical information I've found from lightning protection
companies during my search for documentation on tower, antenna, coax and
rotor cable installation.

73's,

Mike

WB8TNJ

"Harry Conover" <hhc314@yahoo.com> wrote in message
news:7ce4e226.0408101417.a9421d5@posting.google.com...

> "Jack Painter" <223bthp@cox.net> wrote in message
news:<r4_Rc.12079$Yf6.1279@lakeread03>...
> > "Harry Conover" <hhc314@yahoo.com> wrote
> > > radio-operator@telus.net (Private) wrote in message
> > news:<d318809e.0408081853.5e06781a@posting.google.com>...
>
> > >
> > > What I did note missing was the mention of 'lightning chokes' wound in
> > > the coax lines decending from the tower. These are basic to lightning
> > > protection for broadcasting towers, but I've rarely seen them
> > > implemented by hams.
> > >
> > > The idea of a lightning choke is to add a small amount of inductance
> > > to the coax so that if a direct lighting strike happens, the
> > > instantaneous current flowing though the outer jacked of the coax into
> > > your lightning arresters will at least have some amount of impedance
> > > limiting the current magnitude, thus reducing the probability of
> > > destruction of both the coax and the the arrester itself.
> > >
> > > These chokes are more often than not implemented by winding a dozen or
> > > more turns of coax around a form (say a 4" diameter phenolic tube)
> > > prior to the arrester or spark gap.
> > >
> > > Harry C.
> >
> > Harry, that winding of coax may be useful as an RF choke, but it is most
> > certainly not a lightning choke, and will act more like an air-wound
> > transformer than anything else. Not only is this not specified for any
> > lightning protection systems, it is specifically warned against in many.
>
> > Jack Painter
> > Virginia Beach VA
>
> Jack, while I'm sure that you believe this, I really can't guess where
> you obtained such IMHO such massive misinformation.
>

> First of all, it is the purpose the the coiled coax to act as an
> inductor (r.f. choke) because this is how it resists the very rapid
> di/dt common mode characteristic associated with a lightning hit, thus
> limiting the peak discharge energy that the following spark-gaps and
> lightning suppessors must absorb and reducing the overall peak impulse
> power damage potential.
>
> It's basically a brute-force version of the common computer technique
> of placing a ferrite torroid around cables to attenuate their common
> mode impulse transmission/conduction ability. Realize that with
> sufficiently low SWR, currents through both the inner conductor and
> outer shield of a coax are equal, summing to zero, hence there is no
> net electromagnetic field produced. The same is not true for a common
> mode impulse traversing the transmission line. The bottom line is that
> only the common mode impulse resulting from a lightning strike will
> experience the results of the "choke".
>
> I'm not sure why you would believe that a coil of coax would act like
> a 'transformer' of any type, unless the SWR is truly enormous, a
> probem in itself. A case in point is that in both proton synchrotrons
> (typically operating in a swept frequency range of roughly 3-30 Mhz),
> and in large phased array radars (some of which operate in the UHF
> range) employ multiple feeder coax transmission lines that are cut the
> the same electrical length, with the cable lengths in excess of the
> required physical run length being coiled up somewhere in the system.
> There is no net significant electrical effect on the cable's
> transmission characterists in either case.
>
> Prior to completing my degree work at Drexel, I spent 8-years
> installing and maintaining broadcast transmission systems ranging from
> 5-Kw to 50-Kw. This included 5 years as chief engineer in one station
> (WBUD in Trenton, NJ) plus part-time work for WFIL, WCAU, and KYW in
> Philly. (Additional work in 4 or 5 smaller stations.)
>
> Quite honestly, I can't remember a single one of these that did not
> protect their very costly antenna installations, transmitters, and
> on-air reliability without lightning chokes employed in their
> transmission lines. Still, these broadcasters use equipment that, in
> general, nothing more sophisticated than your average ham station, but
> on steroids! True, the average AM broadcasting tower usually exceeds
> 200-feet, but in an intense lightning storm, a 40-foot ham tower is
> fully capable of experiencing the same energy lightning hit!
>
> I purchased my first ham receiver, an SX-71 from a ham named Bob
> Rutkowski (sp?) in Trenton, NJ. A day or so before I picked it up from
> him he took an evidently direct lightning hit on his 40-some foot
> crank up tower holding a 2M beam that was attached to his house. He
> had grounded the outer shield of the RG-8U coax at the based of the
> tower, but without a lightning choke in the coax, the hit simply
> vaporized the majority of his RG-8U, his grounding connection, and

> most of the final tank circuit in his rig in the basement! Not a
> pretty sight!
>
> Realize that a commercial radio broadcaster has to survive episodes
> like this without disruption of their operations. Hams don't. Still
> the emulation of the broadcaster's time proven protection techniques
> involves only a small additional cost to an otherwise excellent
> installation.
>
> For more information, see:
>
> Edmund LaPort, "Radio Antenna Engineering", McGraw-Hill Book Company,
> New York. (My issue carries a 1952 copyright, still it's an 'oldie but
> a goodie' with many subsequent editions -- and AFAIK is still the
> bible of the broadcasting industry.)
>
> IIRC, early editions of the ARRL Handbook also described this
> protection technique (likely pre-1970) in the days when most hams
> built their own rigs.
>
> Harry C.
>
> p.s., Jack, I'd love to hear a citation where "it is specifically
> warned against", and why.

1666. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 17:47:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411bab2a$1_5@127.0.0.1>
Source record: 91087

Art Unwin KB9MZ wrote:
> Does any body see any negatives about this aproach which will always
> be done under zero wind conditions?

How can you know the exact distance the receiver is from
the transmitter? 73, Cecil

1667. Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 17:51:52 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408120951.21b40722@posting.google.com>
Source record: 91088

As the T2FD is growing in popularity,
I hope these issues will be of interest
to more than just a few.

SITUATION

I. I am building a T2FD, for receiving and *maximum* 10W RF out.

II. I have a decent RF and DC ground near the antenna site on top of the building (huge masses of steel), but not in my shack, which is some 120 ft. below. This is not unlike having the antenna out on the lot, and the shack somewhere up in the attic.

III. I want to get rid of any static charges and also to reduce the risk of EMP travelling down the coax. This too must be a concern for quite a few people...

IV. Also, I'd like to avoid as much as possible any hums that may derive from poor double grounding. After all, we mostly do HAVE to ground stuff inside the shack as well, for electrical safety.

PLAN

1) Make the balun with full DC-insulation between high-Z and low-Z windings on the toroid-core balun. If everything is nice and symmetric, only transversal-mode RF will flow.

2) Ground the middle of the high-Z winding to the locally available ground. NOT ground the low-Z winding - I'll just connect it to the coax. Route internal wires for maximum insulation. Fill the balun case with either epoxy or urethane foam. Keep the two leads (coax, ground) well separated.

3) Insert EMP dischargers right into the balun:
- One across the high-Z winding, for transversal mode.
- One between each high-Z lead and ground, for common mode.
- One across the low-Z winding, a'shunt the coax, for transversal-mode.
And also one across the top resistor, also for transversal.

4) Put one or more large iron-core chokes on the coax, as to dampen EMP that could possibly travel on the outside of the coax shield. (This would also ensure that RF power or noise will not travel on the outside of the shield, of course)

LIFE IS FULL OF QUESTIONS
Here are just some of mine.

a) For HV DC insulation in the balun, I intend to use as large a PVC-insulated conductor as I can fit, wind the high-Z winding, wrap it in insulating tape, and wind the low-Z winding on the top of the insulating layer.
- PVC is said to be lossy. Is it a dramatic loss or not?
- What tape should I use?
- Is the insulated core of a coax a decent alternative to HV wire?
- What is the implication of making a low-Z winding ATOP the high-Z one & the insulating layer, instead of interleaving them?

b) For receiving, small 90V neon bulbs should already provide some protection. But 10W RF on 75 ohm already means some 27+ Vrms, wich would rise to over 50Vrms across a balanced 300 ohm load - if the mismatch is modest, that is.
- Are low voltage neons already sufficiently horourable dischargers, or should I consider some other kind of (comparatively more honourable) dischargers?

c) For the coax shield choke, I am considering 20 tight turns on a 5in. plastic pipe, the steel core being made with pieces of thin, insulated rebar - enough to fill the pipe. The core should increase the inductance considerably. Weight not an issue: the choke will be hung somewhere safe on the roof, probably 40 ft. away from the balun.
- Any reason to vote for either major party candidate in the coming election?
- Any reason to use FLAT steel instead of cheap, easy to find rebars?

d) Other than the difference in weight, what are the pros and cons of potting a balun in liquid-poured epoxy resin vs. filling the balun case with urethane foam injected from a can?

Any contributed wisdom will be appreciated!

N1JPR/I2

1668. AEA 10-30 ISOLOOP Antenna Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 18:19:11 UTC
From: Dave <dgmfield@pacbell.net>
Message-ID: <zwOSc.3023$QJ3.2151@newssvr21.news.prodigy.com>
Source record: 91089

My ISO Loop antenna needs a new gear. It is the gear that attaches to the capacitor tuning part.

Any ideas on where I might get a part? AEA is out of business.

1669. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 18:40:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vbdnh0dqrselgnjejt3u5ai2jr886d31uj@4ax.com>
Source record: 91090

On Thu, 12 Aug 2004 12:47:43 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Art Unwin KB9MZ wrote:
>> Does any body see any negatives about this aproach which will always
>> be done under zero wind conditions?
>
>How can you know the exact distance the receiver is from
>the transmitter? 73, Cecil

Two ways:
1. Use an autoresponder and measure the round trip propagation time
(of the last transmission) - this is probably the most accurate;
B. Set the trip meter on your car when you go to find the fallen
airplane (taking care to subtract out all meanders and any excess fuel
that added to the airplane flying out beyond the reception zone);
III. Employ military grade optical range finder to track airplane and
use a transmit signal to inhibit the plane's light strobe - when the
strobe goes on to denote lack of signal strength, then take visual
range reading. For poor antennas, a camera grade range finder may
work just as well;
2ï¿½. Use the old V-1 Buzz Bomb patent log system of a small propeller
geared to indicated travel distance driving a mechanism with voice
synthesis to announce that distance until it can no longer hear the
base station.

There are probably at least two more ways.

73's
Richard Clark, KB7QHC

1670. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 18:42:00 UTC
From: "aunwin@insightbb.com"
Message-ID: <YROSc.248059$IQ4.10508@attbi_s02>
Source record: 91091

I am assuming that when the plane is out of range the battery switch opens
and the plane nose dives.
Haven't opened the box yet but that is my intention to have the controls
work
Best regards
Art
"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:411bab2a$1_5@127.0.0.1...
> Art Unwin KB9MZ wrote:
> > Does any body see any negatives about this aproach which will always
> > be done under zero wind conditions?
>
> How can you know the exact distance the receiver is from
> the transmitter? 73, Cecil
>

1671. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 18:56:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <btenh0hs0sdmsi5naie6aem259gbcmji97@4ax.com>
Source record: 91092

On Thu, 12 Aug 2004 18:42:00 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I am assuming that when the plane is out of range the battery switch opens
>and the plane nose dives.
>Haven't opened the box yet but that is my intention to have the controls
>work
>Best regards
>Art

Hi Art,

I missed the part about this being an "electric" airplane. So, the
plan is for a sort of squelch controlled (supressed) air brake of a
sort, Hmm? What about if the battery runs out before the signal
(false negative)? Get a bigger airplane (battery) I suppose. You
might want to consider that the airplane has advantages of
line-of-sight which means you could contact it for hundreds of miles,
if only you could get it high enough. If you can't, you may as well
ask a ham across the city what you are reading on his S-meter.

73's
Richard Clark, KB7QHC

1672. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 19:10:18 UTC
From: "aunwin@insightbb.com"
Message-ID: <ugPSc.136958$eM2.134579@attbi_s51>
Source record: 91093

I have looked upward more than 20 times to watch a buzz bomb (V1) go
overhead with its characteristic brirp-brurp
tone on the assumption that when it ran out of gas it would start its
erratic journey to ground. If Churchill had council to
your knoweledge as to how theyREALLY were controlled I suspect I would have
hit the deck more than once.
Proves that ignorance is really bliss.
With respect to model airoplanes the controls are limited in power as I
understand it and the range consequently is
somewhat less tha 200 metres. Since all my antennas are worthless acoording
to comment here tests can be undertaken
on my own property.
Art
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vbdnh0dqrselgnjejt3u5ai2jr886d31uj@4ax.com...
> On Thu, 12 Aug 2004 12:47:43 -0500, Cecil Moore <w5dxp@hotmail.com>
> wrote:
>
> >Art Unwin KB9MZ wrote:
> >> Does any body see any negatives about this aproach which will always
> >> be done under zero wind conditions?
> >
> >How can you know the exact distance the receiver is from
> >the transmitter? 73, Cecil
>
> Two ways:
> 1. Use an autoresponder and measure the round trip propagation time
> (of the last transmission) - this is probably the most accurate;
> B. Set the trip meter on your car when you go to find the fallen
> airplane (taking care to subtract out all meanders and any excess fuel
> that added to the airplane flying out beyond the reception zone);
> III. Employ military grade optical range finder to track airplane and
> use a transmit signal to inhibit the plane's light strobe - when the
> strobe goes on to denote lack of signal strength, then take visual
> range reading. For poor antennas, a camera grade range finder may
> work just as well;
> 2. Use the old V-1 Buzz Bomb patent log system of a small propeller
> geared to indicated travel distance driving a mechanism with voice
> synthesis to announce that distance until it can no longer hear the
> base station.
>
> There are probably at least two more ways.
>

> 73's
> Richard Clark, KB7QHC

1673. Re: AEA 10-30 ISOLOOP Antenna Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 19:16:01 UTC
From: "aunwin@insightbb.com"
Message-ID: <RIPSc.136977$eM2.83929@attbi_s51>
Source record: 91094

David
When the brake geared portion of my WW2 prop pitch rotor broke I made a mold
from it. I then
used an epoxy mixture heavily laced with metal filings from the workshop
and poured it into the mold. That was 15 years ago and it is still
functional
Art
"Dave" <dgmfield@pacbell.net> wrote in message
news:zwOSc.3023$QJ3.2151@newssvr21.news.prodigy.com...
> My ISO Loop antenna needs a new gear. It is the gear that attaches to the
> capacitor tuning part.
>
> Any ideas on where I might get a part? AEA is out of business.
>
>

1674. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 19:25:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <scgnh0dcm91ti6obrs88seben1p0m7hpoh@4ax.com>
Source record: 91095

On Thu, 12 Aug 2004 19:10:18 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>I have looked upward more than 20 times to watch a buzz bomb (V1) go
>overhead with its characteristic brirp-brurp
>tone on the assumption that when it ran out of gas it would start its
>erratic journey to ground.

Nope, they were range set against a count down counter that was driven
by a patent log mechanism (boats use this everyday as a taffrail log
or a screw log).

> If Churchill had council to
> your knoweledge as to how theyREALLY were controlled I suspect I would have
>hit the deck more than once.
> Proves that ignorance is really bliss.

Perhaps so. Too bad Churchill didn't subscribe to the History
Channel. ;-)

>With respect to model airoplanes the controls are limited in power as I
>understand it and the range consequently is
>somewhat less tha 200 metres. Since all my antennas are worthless acoording
>to comment here tests can be undertaken
>on my own property.
>Art

You would also need some precision receivers for even those worthless
antennas. For 10M operating out to 200M, only 20 wavelengths, that is
hardly any signal strength change to speak of and to make the plane
dive at some pre-determined signal level is going to take quite a
sophisticated measurement. Keep in mind that neighboring interstate
CB traffic is going to mix in and muddy up the response (your airplane
may follow the next Coke truck to Chicago).

73's
Richard Clark, KB7QHC

1675. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 19:43:11 UTC
From: "aunwin@insightbb.com"
Message-ID: <jLPSc.294900$XM6.108319@attbi_s53>
Source record: 91096

Well if I have to use suffisticated methods that you describe then this idea
is also worthless as it would not receive your stamp of approval. I'll give
the plane to my grandson so that it will not go to waste.
Consider post closed
Art
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:scgnh0dcm91ti6obrs88seben1p0m7hpoh@4ax.com...
> On Thu, 12 Aug 2004 19:10:18 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> >I have looked upward more than 20 times to watch a buzz bomb (V1) go
> >overhead with its characteristic brirp-brurp
> >tone on the assumption that when it ran out of gas it would start its
> >erratic journey to ground.
>
> Nope, they were range set against a count down counter that was driven
> by a patent log mechanism (boats use this everyday as a taffrail log
> or a screw log).
>
> > If Churchill had council to
> > your knoweledge as to how theyREALLY were controlled I suspect I would
have
> >hit the deck more than once.
> > Proves that ignorance is really bliss.
>
> Perhaps so. Too bad Churchill didn't subscribe to the History
> Channel. ;-)
>
> >With respect to model airoplanes the controls are limited in power as I
> >understand it and the range consequently is
> >somewhat less tha 200 metres. Since all my antennas are worthless
acoording
> >to comment here tests can be undertaken
> >on my own property.
> >Art
>
> You would also need some precision receivers for even those worthless
> antennas. For 10M operating out to 200M, only 20 wavelengths, that is
> hardly any signal strength change to speak of and to make the plane
> dive at some pre-determined signal level is going to take quite a
> sophisticated measurement. Keep in mind that neighboring interstate
> CB traffic is going to mix in and muddy up the response (your airplane
> may follow the next Coke truck to Chicago).
>

> 73's
> Richard Clark, KB7QHC

1676. Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 19:43:49 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <u6udnXnHTJvwVYbcRVn-rw@comcast.com>
Source record: 91097

I'm having a bit of a difficult time with analyzing this circut:
http://www.dvanhorn.org/TankCkt.gif

This is an oscillator tank, where C2 and L2 are parallel resonant.
The operating frequency is around 280kHz, with C2 at 3300pF and L2 at 98uH.
The interesting part is where I add L1 at about 40mH and Cg at 0-1pF with
Ctrim at some small but significant value. (ideally, series resonant at
about 290 kHz, but you have to take parasitics into account)

What I'm trying to do, is to determine the oscillating frequency as Cg
changes, and also to evaluate different values of L1 as the series resonance
of L1/Ctrim+Cg moves around the tank resonance. Obviously if the two
resonances collide, it's not nice.

I'm having a hard time finding how to express the change in Cg as a shift in
the resonant point of the oscillator tank.

The formulas that I have for impedance show only the magnitude of the
impedance, and probably aren't applicable to this situation. Where can I
find a better approach for analysis?

Once I have this down, I have to consider the parasitics and series
resistance, especially in L1 which are pretty significant, but I have a
handle on how to apply that.

--
A: Because it messes up the order in which people normally read text.
Q: Why is top-posting such a bad thing?
A: Top-posting.
Q: What is the most annoying thing on usenet?

1677. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 20:02:48 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cfgihphoq1@newshost.mot.com>
Source record: 91100

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message news:YROSc.248059$IQ4.10508@attbi_s02...
> I am assuming that when the plane is out of range the battery switch opens
> and the plane nose dives.
> Haven't opened the box yet but that is my intention to have the controls
> work
> Best regards
> Art

YIKES! You haven't flown one yet??

Flying AND doing some kind of signal measurement??? Your idea of a time-travel transponder is a good one. Me thinkth that you will be spending a long time learning to fly and building all the other equipment before you get to do any measurements

I don't know what you have, but the regular (the 'good' stuff) R/C equipment has a range exceeding one mile or 1.6 Km. This is much farther than you will be able to see it. There are add-on accessories which will cause something to happen when the transmitter disappears, but without one of these, they can simply continue flying until the motor runs out. it may or may not turn or descend until then depending upon what the controls were doing just before the signal died.

In the US, 27 MHz is a hazardous frequency to be on...don't know about elsewhere. Good units are in the 75 MHz range.

Then you have to fly in the far-field, right?

...good luck.

I think I'd find a pilot (my son) and fly around with a receiver...
--
73, Steve N, K,9;d, c. i My email has no u's.

1678. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 20:07:02 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <gOidnZ-B0bFCUIbcRVn-pA@comcast.com>
Source record: 91098

If you're trying to trip something at a specific point, you might try using
a different WWII technique, scaled up. They did bomb releases by flying
till they crossed a radio beam.
You could use a microwave (10-24 GHz) source as your beam transmitter.

Later systems used two beams, and more sophisticated means.

Measuring absolute signal strength, at any real distance, is going to have
such huge variability as to make it useless.

1679. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 20:39:44 UTC
From: "aunwin@insightbb.com"
Message-ID: <kAQSc.248616$IQ4.47740@attbi_s02>
Source record: 91099

Yes, one station emitted dots while another station transmitted dashes, when receipt of the two signal joined to produce a mono tone the plane was at the predetermined point where it would drop its 'messages' on civilians below" The use of phosper gretly helped following waves even tho fires were outed they then reignighted when the material dried. We only had tar paper windows to ensure that guiding lights were not provided as a help.
ArtDave VanHorn" <dvanhorn@cedar.net> wrote in message news:gOidnZ-B0bFCUIbcRVn-pA@comcast.com...
>
> If you're trying to trip something at a specific point, you might try using
> a different WWII technique, scaled up. They did bomb releases by flying
> till they crossed a radio beam.
> You could use a microwave (10-24 GHz) source as your beam transmitter.
>
> Later systems used two beams, and more sophisticated means.
>
> Measuring absolute signal strength, at any real distance, is going to have
> such huge variability as to make it useless.

If an anteena has a specific range dominated by its power input and a distance thru air would not a ntenna with more gain allow it to0 travel a longer distance until the plane
came to a distance to allow a relay to drop out.
I was looking for a meaningfull indication of gain that would not be assaulted gurus negatives with respect to isentropic gain and disbelief of calculations made.
What better way for the man in the street to understand antenna gain rather than messing with dbi, dbd e.t.c., which an amateur uses to fulfill his need for conflict?
Art
>

1680. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 20:48:51 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <TIQSc.6413$l96.5464@nwrddc04.gnilink.net>
Source record: 91101

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0408120852.56d63832@posting.google.com...
> Invariably when antenna gain is mentioned
> questions arise as to gain measurement and accuracy there of.
> I do a lot of antenna experiments and declarations of gain never get
> any where.
> Ihave now purchased a 27 Mhz electric model airoplane and am now in
> the process of making a new design antenna and I intend to measure an
> antennas
> relative gain my comparing the distance travelled by the model by
> usind a standard whip antenna and then by using newly designed
> antenna.
> I visualise keeping a record of distance travelled of my various
> experiment antennas.
> Does any body see any negatives about this aproach which will always
> be done under zero wind conditions? I am looking for a real world
> guide to gain to escape from the gain arguments of today.
> Thanks in advance
> Art

Art

If I'd be allowed to change my mind after I got more thought/information
on this project, I really like the idea. It will be somewhat of an
instrument complex project ?wont it?.
A GPS could record alot of data if the plan includes things like that.
I would have thought that small variations in distance to the aircraft
wouldnt be excessively critical. But, it would be important to keep
records of the angle to the aircraft from the antenna.
I see Excel and some clocks somewhere in there.

This sure would be a fun project. If you do get it working, I'd go to
where you are just to see it in action.

Jerry

1681. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 20:57:43 UTC
From: dplatt@radagast.org
Message-ID: <10hnme73kmf1630@corp.supernews.com>
Source record: 91102

>If an anteena has a specific range dominated by its power input and a
>distance thru air would not a ntenna with more gain allow it to0 travel a
>longer distance until the plane came to a distance to allow a relay to drop out.

If you were able to place both the transmitter, and the plane in free space, and there weren't other signal sources in the area, this approach might work out.

In practice, though, I think you're going to find multipath and reflections to be a real problem. Irregularities in the ground, the presence of buildings and trees, etc. are going to generate enough reflections to cause some serious, and unpredictable changes in the signal strength as seen by the receiver in the plane.

De-sensing of the receiver by transmitters on nearby frequencies, noise pickup, directional variations in the plane receiver's antenna, etc. are also going to be problems. I think you'll need a fairly narrow-band receiver, with a well-controlled and fixed gain and a wide dynamic range, and some form of averaging circuitry to get you past the multipath / picket-fence problems.

I'm sure that something like this _can_ be done, and can probably be done well enough to result in meaningful measurements. To do so, I think you're going to have to invest a good deal of time, energy, thought, and perhaps money in the design. A poorly-designed approach would introduce so many sources of possible error that any results you got from it would not be particularly meaningful or significant.

>I was looking for a meaningfull indication of gain that would not be
>assaulted gurus negatives with respect to isentropic gain and disbelief of
>calculations made.

I'd suggest studying how this sort of measurement is performed in a professional context - e.g. on antenna ranges located out in the country well away from strong RF sources, and in shielded RF-anechoic chambers (for near-field measurements and for higher frequency measurements, where the chamber is a reasonable number of wavelengths across).

>What better way for the man in the street to understand antenna gain rather
>than messing with dbi, dbd e.t.c., which an amateur uses to fulfill his need
>for conflict?

Please don't confuse "conflict" with "criticism". The former is unnecessary (although unfortunately it's rather common). The latter is utterly necessary in any form of scientific endeavor!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1682. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 21:03:00 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <9WQSc.16277$Yf6.6584@lakeread03>
Source record: 91103
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Reasons not to create a coiled-coax "choke"

http://www.comm-omni.com/polyweb/hamradio5.htm
Even though inductive properties of the coax cable appear to be
beneficial, and some extra inductance can be created by adding
a few turns to the coax; don' t do it. The added turns can also
act like an air wound transformer that can couple more energy
into the line. This is just the opposite of the desired effect.
Instead, make sure that coax lines leaving the tower remain at
right angles to the magnetic field surrounding the tower.

http://www.wrblock.com/Papers/Amatuer_Radio/APARS_P09.htm
Neatness counts - cables (transmission lines, power (ac and dc),
speaker, microphone, computer, control) should be cut to length
and routed neatly and cleanly between boxes using the most direct
practical route. The coiling of excess cable length on the
protected side should be avoided since it could act as an air-wound
transformer coupling magnetic energy from a nearby lightning strike
back into the protected equipment.

http://www.marcspages.co.uk/tech/2100.htm
Some in the RF industry would have seen coils used as static drains.
The theory is the coil is high impedance at RF and so looks open
circuit, whilst still presenting a short to the DC and draining it
to deck. The problem with them is they too can start reacting
('scuse the pun!) with the capacitance present on the system,
especially at the lower ends of the band.

24hr ops FULL COVERAGE PROTECTION (no "chokes")
http://users.erols.com/n3rr/lightningprotection/

http://www.alvarion.com/RunTime/Materials/PDFFiles/Lightning_Protection_White_Paper_March3
1_R41.pdf
ALVIRON SUBSCRIBER SYSTEMS TOWER LIGHTNING PROTECTION
(no "chokes")

And one major US communications company which drawings and specs
are confidential and proprietary information - but they do NOT use
any kind of coiled-coax and prohibit same from all systems.

Here's one exception - from an Amplifier and relay company - they
are NOT in the lightning protecton business and this is very
outdated advice, but shown anyway becasue we're honest!

http://www.ameritron.com/ameritron/man/pdf/RCS-4.pdf

We strongly recommend the use of lightning retarding loops
in the coaxial cables near the relay box (see illustration).
Remember that lightning travels through the path of least
resistance. Station ground leads should be solid, large surface
area conductors. Do not use braided or stranded wire for the
ground leads. Avoid sharp bends in the ground leads. Use
multiple ground rods and/or radials to provide the earth
termination.

Recommend you ignore this and maintain direct paths - JP

Finally, Richard Clark's mention of "code" is pretty important. Reference
the NEC-70 and NFPA-780 for US installations.

Jack Painter
Virginia Beach VA
http://members.cox.net/pc-usa/station/grounding.htm

1683. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 21:14:05 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cfgmnd$if5$1@newshost.mot.com>
Source record: 91106

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:u6udnXnHTJvwVYbcRVn-rw@comcast.com...
>
> I'm having a bit of a difficult time with analyzing this circut:
> http://www.dvanhorn.org/TankCkt.gif
>
> This is an oscillator tank, where C2 and L2 are parallel resonant.
> The operating frequency is around 280kHz, with C2 at 3300pF and L2 at
98uH.
> The interesting part is where I add L1 at about 40mH and Cg at 0-1pF with
> Ctrim at some small but significant value. (ideally, series resonant at
> about 290 kHz, but you have to take parasitics into account)
>
> What I'm trying to do, is to determine the oscillating frequency as Cg
> changes, and also to evaluate different values of L1 as the series
resonance
> of L1/Ctrim+Cg moves around the tank resonance. Obviously if the two
> resonances collide, it's not nice.
>
> I'm having a hard time finding how to express the change in Cg as a shift
in
> the resonant point of the oscillator tank.
>
> The formulas that I have for impedance show only the magnitude of the
> impedance, and probably aren't applicable to this situation. Where can I
> find a better approach for analysis?
>
> Once I have this down, I have to consider the parasitics and series
> resistance, especially in L1 which are pretty significant, but I have a
> handle on how to apply that.

It might help if you told what you are ultimately trying to do.
Is this just a thought experiment designed to help you learn something?
Is it a circuit you have/see and are trying to understand it?
That antenna is an unknowns, as well, which I guess you are ignoring...?
From what I see/read, you are trying to do something which is very
awkward...that is, multiple coupled resonances.

Looks like you want to see what kind of "pulling" effect the Delta Cg is
going to have on your oscillator. Why inductive coupling?
The conditions which determine the frequency of oscillation are not confined
to the resonant frequency of your tank, but include phase and gain of the
active device as well.

I modeled a 1 MHz Colpitts in PSpice and it oscillated nicely. Adding other stuff to muck about with it could be done...

--
Steve N, K,9;d, c. i My email has no u's.

1684. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 21:29:53 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <UiRSc.459$rj.322@bignews1.bellsouth.net>
Source record: 91104

How about if you get a field strength meter and walk away from the reference antenna (like a vertical 1/4-wave) until you get a mid-range reading. - then do the same with the tested antenna.
compare the distances - and note that signal strength is inversly related to the square of the distance.
If the distance for the same reading is double for the beam - that means it has 4 times the effective power in that direction.
then convert to db-gain

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message news:85ed38d.0408120852.56d63832@posting.google.com...
> Invariably when antenna gain is mentioned
> questions arise as to gain measurement and accuracy there of.
> I do a lot of antenna experiments and declarations of gain never get
> any where.
> Ihave now purchased a 27 Mhz electric model airoplane and am now in
> the process of making a new design antenna and I intend to measure an
> antennas
> relative gain my comparing the distance travelled by the model by
> usind a standard whip antenna and then by using newly designed
> antenna.
> I visualise keeping a record of distance travelled of my various
> experiment antennas.
> Does any body see any negatives about this aproach which will always
> be done under zero wind conditions? I am looking for a real world
> guide to gain to escape from the gain arguments of today.
> Thanks in advance
> Art

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1685. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 21:31:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <lbmnh0tprbjmq353e5k6cr9l6jqrv9eem0@4ax.com>
Source record: 91105

On 12 Aug 2004 10:51:52 -0700, n1jpr@hotmail.com (SpamHog) wrote:

>As the T2FD is growing in popularity,

Debatable to say the least....

>I hope these issues will be of interest
>to more than just a few.
>
>
>SITUATION
>
>I. I am building a T2FD, for receiving and *maximum* 10W RF out.
>
>II. I have a decent RF and DC ground near the antenna site on top of
>the building (huge masses of steel), but not in my shack, which is
>some 120 ft. below. This is not unlike having the antenna out on the
>lot, and the shack somewhere up in the attic.

Yes, after a fashion. What you mean to say is you are still far from
earth ground, but have plenty of metal.

>III. I want to get rid of any static charges and also to reduce the
>risk of EMP travelling down the coax. This too must be a concern for
>quite a few people...

Certainly are for those who aren't signatories of the Nuclear Test Ban
Treaty.

>IV. Also, I'd like to avoid as much as possible any hums that may
>derive from poor double grounding. After all, we mostly do HAVE to
>ground stuff inside the shack as well, for electrical safety.

Anticipating what follows, perhaps you should simply loop couple all
of that steel at the top of the building. No ground issue there. No
direct connections. No HV problems.

>
>PLAN
>
>1) Make the balun with full DC-insulation between high-Z and low-Z
>windings on the toroid-core balun. If everything is nice and
>symmetric, only transversal-mode RF will flow.

If you do it right - maybe.

>2) Ground the middle of the high-Z winding to the locally available
>ground. NOT ground the low-Z winding - I'll just connect it to the

>coax.

Here is where the part about doing it right raises its ugly head.
Ground is not simply a matter of being bulk metal. At least not RF
ground, and not always safety ground.

>Route internal wires for maximum insulation. Fill the balun
>case with either epoxy or urethane foam. Keep the two leads (coax,
>ground) well separated.

This is more a matter of cosmetics and personal preference than
engineering consideration. Lead dressing is adequate and mounting
does the rest.

>3) Insert EMP dischargers right into the balun:
>- One across the high-Z winding, for transversal mode.
>- One between each high-Z lead and ground, for common mode.
>- One across the low-Z winding, a'shunt the coax, for
>transversal-mode.
>And also one across the top resistor, also for transversal.

The resistor is already going to snub any "EMP" the rest is window
dressing. It takes quite a few KV to jump an inch.

>4) Put one or more large iron-core chokes on the coax, as to dampen
>EMP that could possibly travel on the outside of the coax shield.
>(This would also ensure that RF power or noise will not travel on the
>outside of the shield, of course)

8 turns of 6 inch diameter loops will do just as well, as would a
simple 1:1 Current BalUn. You are too much concerned with Nuclear
Blast. If you suffer EMP, you've got far more to worry about.

>LIFE IS FULL OF QUESTIONS
>Here are just some of mine.
>
>a) For HV DC insulation in the balun, I intend to use as large a
>PVC-insulated conductor as I can fit, wind the high-Z winding, wrap it
>in insulating tape, and wind the low-Z winding on the top of the
>insulating layer.
>- PVC is said to be lossy. Is it a dramatic loss or not?
>- What tape should I use?
>- Is the insulated core of a coax a decent alternative to HV wire?
>- What is the implication of making a low-Z winding ATOP the high-Z
>one & the insulating layer, instead of interleaving them?

10W is not going to generate any potentials to offer such prospects of
arc or corona - unless you are constructing a very small loop or
dipole. You have already described you are using a T2FD which
obviates that headache.

>b) For receiving, small 90V neon bulbs should already provide some
>protection.

And maximum noise generation if they should ever fire. How's that going to happen? Is this massive metal structure at the top of your building an AM transmitter tower with a 50KW signal?

Believe it or not, some Neon bulbs will not fire if they are in the dark (you can certainly force the issue - so I guess EMP will satisfy that in spades).

> But 10W RF on 75 ohm already means some 27+ Vrms, wich
>would rise to over 50Vrms across a balanced 300 ohm load - if the
>mismatch is modest, that is.
>- Are low voltage neons already sufficiently horourable dischargers,
>or should I consider some other kind of (comparatively more
>honourable) dischargers?

Skip them altogether and get on with radio.

>c) For the coax shield choke, I am considering 20 tight turns on a
>5in. plastic pipe,

Excessive by twice.

>the steel core being made with pieces of thin,
>insulated rebar - enough to fill the pipe.

Excessiveï¿½

>The core should increase
>the inductance considerably. Weight not an issue: the choke will be
>hung somewhere safe on the roof, probably 40 ft. away from the balun.
>- Any reason to vote for either major party candidate in the coming
>election?

Vote Status Quo and wait for the night of the Long Knives.

>- Any reason to use FLAT steel instead of cheap, easy to find rebars?

Lead may help with the issues of thermonuclear events.

>d) Other than the difference in weight, what are the pros and cons of
>potting a balun in liquid-poured epoxy resin vs. filling the balun
>case with urethane foam injected from a can?
>
>
>Any contributed wisdom will be appreciated!
>
>N1JPR/I2

Hi OM,

I can only guess this is all about lightning, but you have far more interesting possibilities with the coax drop to your apartment brightening up your bedroom. In fact, you would probably get just as good a signal out if you simply ran 20 feet of coax to a 100 foot wire going up and tying off (or not) to all this metal.

Basically, there is nothing T2FD about your post whatever. Why don't you start over with what you are worried about instead. For one, explain just what EMP means to you.

73's
Richard Clark, KB7QHC

1686. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 23:03:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411bf8a1$1_5@corp.newsgroups.com>
Source record: 91107

Thomas wrote:
> I have an ICOM-725 (HF system, 100W output) connected to a MFJ tuner
> and then about 120 foot feedline run to an antenna I made myself.
>
> I can get the SWR on the MFJ tuner to read nearly 1:1, but the
> transmitter display shows only about a 25% power output.

Is the power output knob on the IC-725 fully clockwise?
What magnitude of forward power does the tuner indicate?

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1687. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 23:04:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411bf8e3$1_5@corp.newsgroups.com>
Source record: 91108

Art Unwin KB9MZ wrote:
> Does any body see any negatives about this aproach which will always
> be done under zero wind conditions?

How do you know the exact distance the receiver is from the
transmitter?

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1688. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 23:35:34 UTC
From: "aunwin@insightbb.com"
Message-ID: <a9TSc.242540$a24.174548@attbi_s03>
Source record: 91109

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:cfgihphoq1@newshost.mot.com...
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:YROSc.248059$IQ4.10508@attbi_s02...
> > I am assuming that when the plane is out of range the battery switch
opens
> > and the plane nose dives.
> > Haven't opened the box yet but that is my intention to have the controls
> > work
> > Best regards
> > Art
>
> YIKES! You haven't flown one yet??
>
> Flying AND doing some kind of signal measurement??? Your idea of a
> time-travel transponder is a good one. Me thinkth that you will be
spending
> a long time learning to fly and building all the other equipment before
you
> get to do any measurements
>
> I don't know what you have, but the regular (the 'good' stuff) R/C
equipment
> has a range exceeding one mile or 1.6 Km. This is much farther than you
> will be able to see it.

Bought it on EBAY fgor $25 shipping included Now
camera type transmission to receiver is about 200 feet max so I do not
expect to be anywhere in the range that you state. Equipment built ready to
go. Keep it in your mind that the engines are driven by batterries and is
not the expensive motor type. Big difference.
Art

There are add-on accessories which will cause
> something to happen when the transmitter disappears, but without one of
> these, they can simply continue flying until the motor runs out. it may
or
> may not turn or descend until then depending upon what the controls were
> doing just before the signal died.
>
> In the US, 27 MHz is a hazardous frequency to be on...don't know about
> elsewhere. Good units are in the 75 MHz range.
>

> Then you have to fly in the far-field, right?
>
> ...good luck.
>
> I think I'd find a pilot (my son) and fly around with a receiver...
> --
> 73, Steve N, K,9;d, c. i My email has no u's.
>
>

1689. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-12 23:51:11 UTC
From: "aunwin@insightbb.com"
Message-ID: <PnTSc.246149$%_6.109745@attbi_s01>
Source record: 91110

Jerry, in the Midwest we have a lot of flat lands with corn and soya beens
so it is very easy to find a place to test after the harvest. Watched
somebody operate one of these and I wopuld expect that you would take an
average of say 5 flights each before the battery die.
One may see reflections off of a corn cob that has not been gleaned. 27 Mhz
was not my frequency of choice but this was available. Planes are two engine
type and are controlled by turning the motors on or off for turns.....
no flap movements....very simple I would think that doing a distance
comparison is more believable when seen than any manufacturers specs and
would give me sufficient
guidance when an improvement occurs. I certainly think it would add
crededance when observed at a club meeting
even tho gurus with a little bit of knoweledge will require more
sophisticated equipment. If I was comparing one
manufacturer to another with respect to
R/C controlled equipment it sure would satisfy me as seeing is believing .
When I asked for comment I had already put in place all the good things
and it was my expectations that the group would focus on the negatives
which is how it came out with a balancing list of negatives to compare
Appreciate the comments
Art
"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:TIQSc.6413$l96.5464@nwrddc04.gnilink.net...
>
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0408120852.56d63832@posting.google.com...
> > Invariably when antenna gain is mentioned
> > questions arise as to gain measurement and accuracy there of.
> > I do a lot of antenna experiments and declarations of gain never get
> > any where.
> > Ihave now purchased a 27 Mhz electric model airoplane and am now in
> > the process of making a new design antenna and I intend to measure an
> > antennas
> > relative gain my comparing the distance travelled by the model by
> > usind a standard whip antenna and then by using newly designed
> > antenna.
> > I visualise keeping a record of distance travelled of my various
> > experiment antennas.
> > Does any body see any negatives about this aproach which will always
> > be done under zero wind conditions? I am looking for a real world
> > guide to gain to escape from the gain arguments of today.
> > Thanks in advance
> > Art
>

>
> Art
>
> If I'd be allowed to change my mind after I got more thought/information
> on this project, I really like the idea. It will be somewhat of an
> instrument complex project ?wont it?.
> A GPS could record alot of data if the plan includes things like that.
> I would have thought that small variations in distance to the aircraft
> wouldnt be excessively critical. But, it would be important to keep
> records of the angle to the aircraft from the antenna.
> I see Excel and some clocks somewhere in there.
>
> This sure would be a fun project. If you do get it working, I'd go to
> where you are just to see it in action.
>
> Jerry
>
>

1690. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 00:21:04 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10ho2vathg697d3@corp.supernews.com>
Source record: 91113

the one with the most grieving lovers and rich offspring wins
deal with it

if we fail to leave the planet we are toast

in the mean time there's 2 meter DXCC

73
H.

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:%yTSc.246169$%_6.22544@attbi_s01...
> I thought I had answered this one
> As a child I made many balsa wood planes driven by coiled rubber bands.
> These had a propensity to nose dive into the ground a condition I had
> expected when the battery relay opened on a present day R/C electric
plane
> I always thought the the one with the most toys wins so the purchased
plane
> can't hurt
> Regards
> Artl
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:411bf8e3$1_5@corp.newsgroups.com...
> > Art Unwin KB9MZ wrote:
> > > Does any body see any negatives about this aproach which will always
> > > be done under zero wind conditions?
> >
> > How do you know the exact distance the receiver is from the
> > transmitter?
> >
> >
> >
> > -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> > http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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>
>

1691. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 00:29:10 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10ho2qms3t7tsb7@corp.supernews.com>
Source record: 91111

Running into a 50 ohm dummy load allows full transmitter output.

Yes, the IC-725 power output know was fully clockwise.

When connected to the antenna the IC-725 indicates 25 - 50% power (not much needle deflection difference between the two) and the tuner power meter indicates in the 25W to 50W range.

So it works into the the dummy load, next steps?

Thanks.

Thomas

Cecil Moore wrote:
> Thomas wrote:
>
>> I have an ICOM-725 (HF system, 100W output) connected to a MFJ tuner
>> and then about 120 foot feedline run to an antenna I made myself.
>>
>> I can get the SWR on the MFJ tuner to read nearly 1:1, but the
>> transmitter display shows only about a 25% power output.
>
>
> Is the power output knob on the IC-725 fully clockwise?
> What magnitude of forward power does the tuner indicate?
>
>
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1692. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 00:31:35 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <HZTSc.31825$114.25413@nwrddc02.gnilink.net>
Source record: 91112

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:PnTSc.246149$%_6.109745@attbi_s01...
> Jerry, in the Midwest we have a lot of flat lands with corn and soya beens
> so it is very easy to find a place to test after the harvest. Watched
> somebody operate one of these and I wopuld expect that you would take an
> average of say 5 flights each before the battery die.
> One may see reflections off of a corn cob that has not been gleaned. 27
Mhz
> was not my frequency of choice but this was available. Planes are two
engine
> type and are controlled by turning the motors on or off for turns.....
> no flap movements....very simple I would think that doing a distance
> comparison is more believable when seen than any manufacturers specs and
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> guidance when an improvement occurs. I certainly think it would add
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> manufacturer to another with respect to
> R/C controlled equipment it sure would satisfy me as seeing is believing .
> When I asked for comment I had already put in place all the good things
> and it was my expectations that the group would focus on the negatives
> which is how it came out with a balancing list of negatives to compare
> Appreciate the comments
> Art
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:TIQSc.6413$l96.5464@nwrddc04.gnilink.net...
> >
> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0408120852.56d63832@posting.google.com...
> > > Invariably when antenna gain is mentioned
> > > questions arise as to gain measurement and accuracy there of.
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> > > guide to gain to escape from the gain arguments of today.
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Art

If the goal is to compare the signal strength of an antenna under test,
with the signal strength from a standard antenna, like a quarter wave
vertical, I'd think this aircraft method would provide decent information.
I do think there is no way to determine the performance of the 'antenna
under test' so the antenna design community could accept the data. But, it
would be a valid comparison of any antenna with a standard antenna. That
would be a "specific antenna gain".
How would you sense the variation in signal strength received at the
aircraft?

Jerry

1693. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 00:34:28 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <9--dnYKPPOARkYHcRVn-vA@comcast.com>
Source record: 91114

> It might help if you told what you are ultimately trying to do.
> Is this just a thought experiment designed to help you learn something?
> Is it a circuit you have/see and are trying to understand it?

I have several schematics (all roughly similar), and a couple physical
items.
I'm trying to understand the interactions, and what all the variables are.
It's hard to explain in concise terms.

I've modeled the effect of Cg on the tank directly, that's easy, and the
effect is rather small.
Adding the series inductor makes a large and desirable change.

> That antenna is an unknowns, as well, which I guess you are ignoring...?
No, that's part of Cg. I am approximating it's capacitance based on it's
surface area, using the formula for the capacitance of a sphere. I know
it's not a sphere, but I have yet to see a formula for the capacitance of a
rod in space. That's a starting point anyway.

> From what I see/read, you are trying to do something which is very
> awkward...that is, multiple coupled resonances.

It does seem awkward, but there are interesting things going on here.

> Looks like you want to see what kind of "pulling" effect the Delta Cg is
> going to have on your oscillator. Why inductive coupling?

It appears that the inductor amplifies the effect of Cg.

> The conditions which determine the frequency of oscillation are not
> confined
> to the resonant frequency of your tank, but include phase and gain of the
> active device as well.

Right.

> I modeled a 1 MHz Colpitts in PSpice and it oscillated nicely. Adding
> other
> stuff to muck about with it could be done...

I've not tried this in spice yet., I suppose that's an option.

> --
> Steve N, K,9;d, c. i My email has no u's.
>
>

1694. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 00:55:45 UTC
From: "aunwin@insightbb.com"
Message-ID: <lkUSc.294426$Oq2.10094@attbi_s52>
Source record: 91115

Would not distance resolve that with the battery fully charged. Is not that the same when using a strength meter?I think Cecil should consider something like this for the 'shoot out' so as to advertise amateur radio and let the wives know what is going on. Perhaps try this at Las Vegas (check for insurgents and RPGs ofcourse)
I am sure that Cecil has the know how to smooth out the rough edges.
Art
"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:HZTSc.31825$114.25413@nwrddc02.gnilink.net...
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:PnTSc.246149$%_6.109745@attbi_s01...
> > Jerry, in the Midwest we have a lot of flat lands with corn and soya
beens
> > so it is very easy to find a place to test after the harvest. Watched
> > somebody operate one of these and I wopuld expect that you would take an
> > average of say 5 flights each before the battery die.
> > One may see reflections off of a corn cob that has not been gleaned. 27
> Mhz
> > was not my frequency of choice but this was available. Planes are two
> engine
> > type and are controlled by turning the motors on or off for turns.....
> > no flap movements....very simple I would think that doing a distance
> > comparison is more believable when seen than any manufacturers specs and
> > would give me sufficient
> > guidance when an improvement occurs. I certainly think it would add
> > crededance when observed at a club meeting
> > even tho gurus with a little bit of knoweledge will require more
> > sophisticated equipment. If I was comparing one
> > manufacturer to another with respect to
> > R/C controlled equipment it sure would satisfy me as seeing is believing
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> > When I asked for comment I had already put in place all the good things
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> would be a "specific antenna gain".
> How would you sense the variation in signal strength received at the

> aircraft?
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> Jerry
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1695. Re: w5gi

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:04:40 UTC
From: Fred Hambrecht Sr - Gilbert News <w4jle@w4jle.com>
Message-ID: <_sUSc.84$6G.73@fe39.usenetserver.com>
Source record: 91116

Step right upladies and gentlemen... For only the tenth part of a dollar you can see it crawl on it's belly like a reptile...

Any antenna that claims it can't be modeled and has mystery in it's name...

The only mystery is why anyone buys the hype.

"Jayne Medley" <kjm52@blomand.net> wrote in message news:cf4q83$5j1g$1@news3.infoave.net...
> Someone with a W5GI antenna up let me know what they think . Do not want to
> waste time if it does work Tnx
>
>

1696. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:13:52 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <kBUSc.13881$EQ5.1096@nwrddc03.gnilink.net>
Source record: 91117

Oh Yeah -- Now I see the reason for refering to V2 flying bombs.
I was thinking there was an effort to fly the aircraft at and around
certain spots in the sky.

I think I could benefit from taking one of those *reading courses* I hear
advertized.

I am presently using a NOAA satellite and an S-Meter for my pattern range
at 137 MHz. I'm trying to synchronize Excel with the satellite position
right now. I dont propose that this experiment of mine has any practical
value.

Jerry

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1697. Problem with Gamma Match?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:15:41 UTC
From: Jason Dugas <kb5urq@hotmail.com>
Message-ID: <10ho5h93d1ed7d7@corp.supernews.com>
Source record: 91118

I'm having a problem with a 10-element Coushcraft yagi for 2m. I put the analyzer on it and its reading high SWR. I have tried moving it around, changing coax, etc in order to try and get something to change but I have not been able to isolate the problem.

I'm convinced the RF is being reflected at the antenna itself and not in the coax or other connections leading up to the gamma match. Looking for recomendations on what I could do to fix this thing. Its a pretty old antenna that has set out for a long time.

Thanks,

Jason

1698. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:18:57 UTC
From: w4udx <w4udx@bellsouth.net>
Message-ID: <5GUSc.591$tk.85@bignews6.bellsouth.net>
Source record: 91119

Replace your jumper with a good quality 3 ft RG-8X jumper....

"Thomas" <krt2054@charter.net> wrote in message
news:33d49c4.0408120651.3797cb54@posting.google.com...
> I have an ICOM-725 (HF system, 100W output) connected to a MFJ tuner
> and then about 120 foot feedline run to an antenna I made myself.
>
> I can get the SWR on the MFJ tuner to read nearly 1:1, but the
> transmitter display shows only about a 25% power output.
>
> It occurs to me that the impedence that the tuner is "seeing" is so
> high that the transmitter simply cannot supply the necessary current,
> i.e., as with any voltage source that gets swamped.
>
> Make sense, or am I barking up the wrong tree?
>
> Thanks.
>
> Thomas

1699. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:20:17 UTC
From: Fred Hambrecht Sr - Gilbert News <w4jle@w4jle.com>
Message-ID: <xHUSc.90$6G.16@fe39.usenetserver.com>
Source record: 91120

How about electric fence wire? A 1/4 mile spool of 17 guage aluminium goes
for about $20.00 at your local farm supply store.

"W8LU" <w8lu@semdxa.org> wrote in message
news:b2gch0h1rnrrkaq13cmmq68vc17dfauf1l@4ax.com...
> I'm looking for a source of radial wire. Possibly I can order over
> the internet. Do you have any suggestions?
> Tnx es 73 de Ken, W8LU

1700. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:23:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tf4oh0t7kp96hgs2p1mn09nm9n8o4qsl19@4ax.com>
Source record: 91021

On Thu, 12 Aug 2004 19:34:28 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>I have yet to see a formula for the capacitance of a
>rod in space.

Hi Dave,

That is not particularly hard if you have mathematical software like Mathcad. You simply do it "by parts." That is reduce the cylinder to a sheet 1mm tall and figure its surface area (pi ï¿½ D ï¿½ mmï¿½). This will be a constant value. Iterate that value over succeedingly remote distances from an infinite conducting plane. Add up all the iterations. (This is simply the integral of the capacitance formula for dz where z varies from an initial separation to a value equal to the height - 1mm.) For capacitors, capacitance is always described by the smallest plate so this is an accurate first pass approximation.

For instance (forgive the mix of units) a 1" thick rod, 9.4M tall, standing 10mm off of ground presents a 0Hz capacitance of 5pF. You could move it closer to ground (1mm) and raise this to 7pF, or you could lop off 8 meters and lower it to 3pF (not much variation).

However (and this is one of those points so ill-treated in this group) you cannot treat this capacitance as an equivalent capacitor for RF. The real component is much too big and this violates the first principles of Kirchhoff's requirements that physical dimensions must be extremely short with comparison to wavelength. The last time this one got wrapped around the axle was over the issue of lumped impedances.

The antenna may present any complex value of reactance to its terminals, including capacitances that belie this simple first pass analysis above. This, I doubt, is something that SPICE is sophisticated enough to deal with, as it also expects all lumped components and circuits to exist within very small dimensions relative to the wavelengths being supported.

Time to break out that XXth century museum piece, the Smith Chart.

73's
Richard Clark, KB7QHC

1701. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:26:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9v5oh0ddgnnehe8p20neao6dsr9qmu7shc@4ax.com>
Source record: 91022

On Thu, 12 Aug 2004 20:29:10 -0400, Thomas <nospam@nospam.com> wrote:

>So it works into the the dummy load, next steps?

Hi Thomas,

Add a choke at the load (the antenna). Foldback of power, even in the face of 1:1 SWR, is suggestive of poor transmission line decoupling. One test is to vary the length of the line. If the SWR changes, this is a certain indicator of the problem.

73's
Richard Clark, KB7QHC

1702. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 01:52:21 UTC
From: "aunwin@insightbb.com"
Message-ID: <p9VSc.246469$%_6.207385@attbi_s01>
Source record: 91023

No the V2s were a totally different thing. That was the sequel to Big Bertha
that shelled England from France
The V2 was a true rocket and I swear that I heard two bangs when they
landed, one when they hit the ground and 2 when it exploded. Either way it
was satisfying to hear as you then knew then thatyou were not dead, tho many
on this newsgroup would maintain that brain damage did occur
Art
"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:kBUSc.13881$EQ5.1096@nwrddc03.gnilink.net...
> Oh Yeah -- Now I see the reason for refering to V2 flying bombs.
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> > > I do think there is no way to determine the performance of the
> 'antenna
> > > under test' so the antenna design community could accept the data.
> But,
> > it
> > > would be a valid comparison of any antenna with a standard antenna.
> That
> > > would be a "specific antenna gain".
> > > How would you sense the variation in signal strength received at the
> > > aircraft?
> > >
> > > Jerry
> > >
> > >
> >
> >
>
>

1703. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:11:06 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <RqVSc.622$tk.425@bignews6.bellsouth.net>
Source record: 91024

ok - he could stand on his head while doing it - would that be complicated
enough ?

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:%tTSc.113811$8_6.4732@attbi_s04...
> Yes but it still does not have believability on this group as immediately
> there would be concern about the accuracy of the equipments used and the
> suggestion that one must try for accuracy by going into free space as well
> as the position of your body when obseving measurements.
> To do thing right one must have complexity to convince a guru
> Art
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:UiRSc.459$rj.322@bignews1.bellsouth.net...
> >
> >
> > How about if you get a field strength meter and walk away from the
> reference
> > antenna (like a vertical 1/4-wave) until you get a mid-range reading. -
> then
> > do the same with the tested antenna.
> > compare the distances - and note that signal strength is inversly
related
> to
> > the square of the distance.
> > If the distance for the same reading is double for the beam - that means
> it
> > has 4 times the effective power in that direction.
> > then convert to db-gain
> >
> >
> >
> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0408120852.56d63832@posting.google.com...
> > > Invariably when antenna gain is mentioned
> > > questions arise as to gain measurement and accuracy there of.
> > > I do a lot of antenna experiments and declarations of gain never get
> > > any where.
> > > Ihave now purchased a 27 Mhz electric model airoplane and am now in
> > > the process of making a new design antenna and I intend to measure an
> > > antennas
> > > relative gain my comparing the distance travelled by the model by
> > > usind a standard whip antenna and then by using newly designed
> > > antenna.
> > > I visualise keeping a record of distance travelled of my various

> > > experiment antennas.
> > > Does any body see any negatives about this aproach which will always
> > > be done under zero wind conditions? I am looking for a real world
> > > guide to gain to escape from the gain arguments of today.
> > > Thanks in advance
> > > Art
> >
> >
> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
> >
> >
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1704. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:12:47 UTC
From: "aunwin@insightbb.com"
Message-ID: <zsVSc.249733$IQ4.140219@attbi_s02>
Source record: 91025

Well I may be in luck as I haven't opened the parcel yet
Maybe a car aproach will satisfy some
Art
"Fred Hambrecht Sr - Gilbert News" <w4jle@w4jle.com> wrote in message
news:TeVSc.107$6G.12@fe39.usenetserver.com...
> The correct air craft control freqs are in the 72 Mhz band, 75 is used
only
> for ground vehicles ie. cars, boats etc.
>
> As a ham you may use any ham freq IAW amateur regs.
>
> "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
> news:cfgihphoq1@newshost.mot.com...
> >
> > "aunwin@insightbb.com"
> > In the US, 27 MHz is a hazardous frequency to be on...don't know about
> > elsewhere. Good units are in the 75 MHz range.
> >
>
>
>

1705. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:13:33 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <nZudnTFx89tevoHcRVn-gQ@comcast.com>
Source record: 91026

> For instance (forgive the mix of units) a 1" thick rod, 9.4M tall,
> standing 10mm off of ground presents a 0Hz capacitance of 5pF. You
> could move it closer to ground (1mm) and raise this to 7pF, or you
> could lop off 8 meters and lower it to 3pF (not much variation).

If it were on a copper plane, it would typically be about 4' from the plane.

> However (and this is one of those points so ill-treated in this group)
> you cannot treat this capacitance as an equivalent capacitor for RF.
> The real component is much too big and this violates the first
> principles of Kirchhoff's requirements that physical dimensions must
> be extremely short with comparison to wavelength. The last time this
> one got wrapped around the axle was over the issue of lumped
> impedances.

Well, I would say 17" is pretty short at 280kHz.

> The antenna may present any complex value of reactance to its
> terminals, including capacitances that belie this simple first pass
> analysis above. This, I doubt, is something that SPICE is
> sophisticated enough to deal with, as it also expects all lumped
> components and circuits to exist within very small dimensions relative
> to the wavelengths being supported.

Well, it's certainly not going to work with the flat plate close spacing
model.

Later, I want to look at the effects that happen if the cylinder isn't
circular, when the hand is very close, as opposed to say 10's of diameters
away. I do think that carving it into pieces might get to a pretty good
approximation ala FEA.

> Time to break out that XXth century museum piece, the Smith Chart.

Hmm.. I just picked up a smith chart implementation in mathcad.

1706. Re: Problem with Gamma Match?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:22:06 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <H7udnczu78NRuIHcRVn-sA@comcast.com>
Source record: 91027

Jason,

I have the same antenna, and had the same problem. Turned out to be the coax connector (SO239?) that connects to the gamma match. It is not well fastened to the angle bracket, and was not making good contact, even though it looked OK. To make it worse, it is screwed into the bracket from the back side. When you tighten the plug, you are turning it in the direction to loosen the socket. If mine acts up again, I am going to replace it with the connector that mounts with 4 screws,

Tam/WB2TT
"Jason Dugas" <kb5urq@hotmail.com> wrote in message
news:10ho5h93d1ed7d7@corp.supernews.com...
> I'm having a problem with a 10-element Coushcraft yagi for 2m. I put the
> analyzer on it and its reading high SWR. I have tried moving it around,
> changing coax, etc in order to try and get something to change but I have
> not been able to isolate the problem.
>
> I'm convinced the RF is being reflected at the antenna itself and not in
the
> coax or other connections leading up to the gamma match. Looking for
> recomendations on what I could do to fix this thing. Its a pretty old
> antenna that has set out for a long time.
>
> Thanks,
>
> Jason
>
>
>
>

1707. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:37:52 UTC
From: "aunwin@insightbb.com"
Message-ID: <4QVSc.114239$8_6.109732@attbi_s04>
Source record: 91028

Well I opened the parcel to check things out
The frequency is 27.5 MHZ and is to be flown in an area
with 200 feet from obstructions such as trees. It will land when beyond
range of transmitter
Art
"Fred Hambrecht Sr - Gilbert News" <w4jle@w4jle.com> wrote in message
news:TeVSc.107$6G.12@fe39.usenetserver.com...
> The correct air craft control freqs are in the 72 Mhz band, 75 is used
only
> for ground vehicles ie. cars, boats etc.
>
> As a ham you may use any ham freq IAW amateur regs.
>
> "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
> news:cfgihphoq1@newshost.mot.com...
> >
> > "aunwin@insightbb.com"
> > In the US, 27 MHz is a hazardous frequency to be on...don't know about
> > elsewhere. Good units are in the 75 MHz range.
> >
>
>
>

1708. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:39:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <c7aoh01urrum1ipajcgvbevolmthlpnk0i@4ax.com>
Source record: 91029

On Thu, 12 Aug 2004 21:13:33 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>Well, it's certainly not going to work with the flat plate close spacing
>model.
>
>Later, I want to look at the effects that happen if the cylinder isn't
>circular, when the hand is very close, as opposed to say 10's of diameters
>away. I do think that carving it into pieces might get to a pretty good
>approximation ala FEA.

Hi Dave,

Shape will probably have very little to do with it. If anything, the
computation by parts reveals that the last 90% of the rod is more or
less superfluous to the total value (at least for my example).

>> Time to break out that XXth century museum piece, the Smith Chart.
>
>Hmm.. I just picked up a smith chart implementation in mathcad.
>
Post me that file, would you?

73's
Richard Clark, KB7QHC

1709. Ring-and-stub antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:51:24 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10hob3rbg2kcad2@corp.supernews.com>
Source record: 91030

Two bays, well above ground, fed in the middle is about as good as can be done. That is essentially what anonymous said. --- coax to a T and equal runs from the T to identical elements ---

[Note that using this scheme with identical HF antennas that are not many WLs above ground, will not optimize performance.]

As pointed out in a recent thread, the ring-and-stub antenna is sensitive to small changes in dimensions. [very sensitive] If the antenna is to be designed to be used where it is desired to have the free-space vertical and horizontal patterns be close to each other (in the horizontal plane), as in licensed broadcast applications, expect a lot of tweaking.

On the other hand, if it is not important to "balance" the patterns, most any balanced feed system will work to produce most of the gain near the horizontal plane.

Recently, I was faced with the issue of finding an optimum spacing of such an array from the face of a solid tower with a diameter of about 0.1 wave lengths. No hope, of course, in having the same real world vertical and horizontal patterns. However, it was possible to find a spacing that tailored the two patterns to an acceptable degree. The modeling needed a very large number of segments!

For amateur use, just space the phase center of the most important part of the antenna the magic 0.3 wave lengths from the tower surface and point the antenna in the most desired direction. Fortunately, because the most common amateur use is probably in conjunction with a repeater, one would be advised to use good old reliable vertical dipoles as the elements.

In short, in my opinion, you need to have a mighty good reason to deal with ring-and-stub antennas. For amateur use, better options exist.

73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

1710. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:55:19 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <D5edndHDqZEQsIHcRVn-hQ@comcast.com>
Source record: 91031

>>Hmm.. I just picked up a smith chart implementation in mathcad.
>>
> Post me that file, would you?

http://www.circuitsage.com/matching.html

Look down just a bit.

1711. Re: Resonant frequency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 02:56:24 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <dvWdnbcSV65TsIHcRVn-uA@comcast.com>
Source record: 91032

> Shape will probably have very little to do with it. If anything, the
> computation by parts reveals that the last 90% of the rod is more or
> less superfluous to the total value (at least for my example).

Trying actual hardware, the last 1/8 inch is very significant, shifting the oscillator several hundred Hz.

1712. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 03:06:50 UTC
From: Silly Penguin <SillyPenguin@SparkingWire.com>
Message-ID: <411c304b@post.usenet.com>
Source record: 91033

**** Post for FREE via your newsreader at post.usenet.com ****

A Unwin wrote:
> It will **land** when beyond
> range of transmitter

Let's be precise - it will crash...

-=-=-=

1713. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 03:32:59 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411c37b6_4@corp.newsgroups.com>
Source record: 91034

aunwin@insightbb.com wrote:
> I thought I had answered this one.

Sorry, my other newsgroup account lied and said it
didn't post the first time so I switched accounts
and asked the question again. 73, Cecil

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1714. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 03:42:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411c39d8_4@corp.newsgroups.com>
Source record: 91035

Thomas wrote:
> So it works into the the dummy load, next steps?

Theoretically, common-mode currents can cause
weird problems like this one. It's possible that
common-mode currents are causing an erroneous SWR meter
reading and the differential SWR is not actually 1:1.
Does the SWR meter reading change when you touch the
tuner chassis or run your hand up and down the coax?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1715. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 03:46:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411c3af9$1_4@corp.newsgroups.com>
Source record: 91036

Richard Clark wrote:
> One test is to vary the length of the line. If the SWR changes, this
> is a certain indicator of the problem.

Heh, heh, that's how I tune my antenna system - vary the length
of the ladder-line until the 50 ohm SWR is close to 1:1.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1716. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 04:38:51 UTC
From: "aunwin@insightbb.com"
Message-ID: <uBXSc.277827$JR4.168658@attbi_s54>
Source record: 91037

Your knoweledge exceeds mine on this subject
The instructions say it can take of and also land on at from hard surfaces.
With two engines being in the contol positions of either on or off it would
suggest that without power the plane will "glide" to a landing. this gliding
after exceeding transmitter range does present distance measurement
problems. Perhaps if the plane was weighted the landing could be more
"precise" as you say
but short of a "crash"
Seems like toys holds interests of every one .
Art
"Silly Penguin" <SillyPenguin@SparkingWire.com> wrote in message
news:411c304b@post.usenet.com...
> **** Post for FREE via your newsreader at post.usenet.com ****
>
> A Unwin wrote:
> > It will **land** when beyond
> > range of transmitter
>
> Let's be precise - it will crash...
>
>
>
> -=-=-=-

1717. Re: Transmitter power output

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 09:11:53 UTC
From: sm7vvg <sm7vvg@telia.com>
Message-ID: <tB%Sc.100727$dP1.350347@newsc.telia.net>
Source record: 91038

MFJ has some notes, as in my 969 manual, about avoiding certains lengths.
Get the manual from www.mfjenterprises.com and have a look.

Regards Jan

"Thomas" <krt2054@charter.net> skrev i meddelandet
news:33d49c4.0408120651.3797cb54@posting.google.com...
> I have an ICOM-725 (HF system, 100W output) connected to a MFJ tuner
> and then about 120 foot feedline run to an antenna I made myself.
>
> I can get the SWR on the MFJ tuner to read nearly 1:1, but the
> transmitter display shows only about a 25% power output.
>
> It occurs to me that the impedence that the tuner is "seeing" is so
> high that the transmitter simply cannot supply the necessary current,
> i.e., as with any voltage source that gets swamped.
>
> Make sense, or am I barking up the wrong tree?
>
> Thanks.
>
> Thomas

1718. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 09:16:01 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408130116.4ac9a47b@posting.google.com>
Source record: 91039

Thank you Richard! I'll try to explain.

> >II. I have a decent RF and DC ground near the antenna site on top of
> >the building (huge masses of steel), but not in my shack, which is
> >some 120 ft. below. This is not unlike having the antenna out on the
> >lot, and the shack somewhere up in the attic.
>
> Yes, after a fashion. What you mean to say is you are still far from
> earth ground, but have plenty of metal.

Yes, it sounds weird, because it is. I have to thank another ham,
I2FZX, for the almost ideal situation.

On the TOP of my building there's a 50 ft steel lattice tower
(HF/VHF/UHF beams) and a tornado-proof 20 ft dish (1/2 kW UHF
moonbounce). They are some 80ft apart, both grounded.

Right now, I still have no real grounding in my flat - I just have a
virtual ground connecting all the conductive material in the shack,
which does help reduce noise and hazards. I intend to at least bring
the wiring up to regulation. That won't help with lightning safety,
though.

I intend to string the T2FD between the fixed part of the tower
(~40ft) and the base of the dish. I could use either for grounding,
but I'd opt for grounding at the dish, which is right atop my place.

>> EMP
> Certainly are for those who aren't signatories of the
> Nuclear Test Ban Treaty.

This is a bad neighborhood. Nuke blasts are an almost daily
occurence. As they are not meant for testing purposes, I am afraid the
NTB treaty does not apply. Also, there's a known focus of Al Qaeda
activity just a mile away (go to www.tuttocitta.it and plonk in Milano
/ Viale Jenner 50) but it can't be closed because it would hurt
certain people's sensitivities. I wear lead pants all the time.

> >IV. Also, I'd like to avoid as much as possible any hums that may
> >derive from poor double grounding. After all, we mostly do HAVE to
> >ground stuff inside the shack as well, for electrical safety.
>
> Anticipating what follows, perhaps you should simply loop couple all
> of that steel at the top of the building. No ground issue there. No
> direct connections. No HV problems.

Please elaborate. Do you mean turning the warship atop my bldg into a ground reference loop?

> >2) Ground the middle of the high-Z winding to the locally available
> >ground. NOT ground the low-Z winding - I'll just connect it to the
> >coax.
>
> Here is where the part about doing it right raises its ugly head.
> Ground is not simply a matter of being bulk metal. At least not RF
> ground, and not always safety ground.

Well, not exactly.

A large bulk of metal is usually a pretty good capacitive sink at HF. In fact, even an insulated structure works decently as a RF ground. I even built crystal radios in which very few square inches of sheet metal were enough to provide a cap sink that had a large effect when worked against a wire antenna.

As for safety ground, NEVER "assume" that a bulk of metal is grounded. If you did, you could easily be found guilty of manslaughter in court. In some jurisdictions you have to get an an electrician to sign you off that, among other things, a piece of eqpt is properly grounded.

In professional radio installations, one sees a "ground reference" system which is indeed DC-grounded, but for RF purposes, most of the sink effect comes from strapping together everything in sight, including cabinets, metal furniture, building structures, drains, floor support etc etc.

> >Route internal wires for maximum insulation. Fill the balun
> >case with either epoxy or urethane foam. Keep the two leads (coax,
> >ground) well separated.
>
> This is more a matter of cosmetics and personal preference than
> engineering consideration.

I would like to maximize the chance that any burst of energy will take the ground path rather than the coax path. Why should putting, say, 3kV insulation between the antenna and the coax not matter? Incidentally, you do find kV-range insulation in commercial products as well.

> Lead dressing is adequate and mounting
> does the rest.

What do you mean?

> >3) Insert EMP dischargers right into the balun:
> >- One across the high-Z winding, for transversal mode.
> >- One between each high-Z lead and ground, for common mode.
> >- One across the low-Z winding, a'shunt the coax, for
> >transversal-mode.
> >And also one across the top resistor, also for transversal.

>
> The resistor is already going to snub any "EMP" the rest is window
> dressing. It takes quite a few KV to jump an inch.

So it snubs any EMP but not an RF signal. What is the spectrum of an
EMP? Is it more like DC or more like all across the RF spectrum?

> >4) Put one or more large iron-core chokes on the coax, as to dampen
> >EMP that could possibly travel on the outside of the coax shield.
> >(This would also ensure that RF power or noise will not travel on the
> >outside of the shield, of course)
>
> 8 turns of 6 inch diameter loops will do just as well, as would a
> simple 1:1 Current BalUn. You are too much concerned with Nuclear
> Blast. If you suffer EMP, you've got far more to worry about.

Now I understand. FYI, what gets you in a lightning near-hit _is_ an
EMP.

I once had an audible arc in an antenna due to a 1-lightning
thunderstorm. That single hit happened in the midst of a city, and
took out several power stations and countless other equipment. My
antenna was 8 miles away.

> >a) For HV DC insulation in the balun, I intend to use as large a
> >PVC-insulated conductor as I can fit, wind the high-Z winding, wrap it
> >in insulating tape, and wind the low-Z winding on the top of the
> >insulating layer.
> >- PVC is said to be lossy. Is it a dramatic loss or not?
> >- What tape should I use?
> >- Is the insulated core of a coax a decent alternative to HV wire?
> >- What is the implication of making a low-Z winding ATOP the high-Z
> >one & the insulating layer, instead of interleaving them?
>
> 10W is not going to generate any potentials to offer such prospects of
> arc or corona - unless you are constructing a very small loop or
> dipole. You have already described you are using a T2FD which
> obviates that headache.

Great! But what about losses?

I NEVER saw baluns with windings atop each other
- they were always directly wound on the core.
And I don't know why.

> >b) For receiving, small 90V neon bulbs should already provide some
> >protection.
>
> And maximum noise generation if they should ever fire. How's that
> going to happen? Is this massive metal structure at the top of your
> building an AM transmitter tower with a 50KW signal?

Nothing but EMP. Lightning arrestors, if not MOV, are mostly gas discharge devices. All of yesteryear's professional toob radios and many consumer ones included a tiny neon lamp in their front end.

> >c) For the coax shield choke, I am considering 20 tight turns on a
> >5in. plastic pipe,
> >the steel core being made with pieces of thin,
> >insulated rebar - enough to fill the pipe.
>
> Excessiveï¿½

OK!

> >- Any reason to vote for either major party candidate in the coming
> >election?
>
> Vote Status Quo and wait for the night of the Long Knives.

OK! Will do.

> >- Any reason to use FLAT steel instead of cheap, easy to find rebars?
> Lead may help with the issues of thermonuclear events.

Great! But lead will lead to lead poisoning litigation too.

I don't want to litigate a lead-poisoned nuclear-armed jihadi.

Lead poisoning is also rumored to lead people to insanity
- see Goya (the painter, not the beans).

So, I don't want to litigate a lead-poisoned nuclear-armed totally-out-of-his-mind jihadi either.

> In fact, you would probably get just as
> good a signal out if you simply ran 20 feet of coax to a 100 foot wire
> going up and tying off (or not) to all this metal.

I had thought about that too, esp. for LF! Problem is, between moi and the warship up on top lie crouching and waiting a few tens of TV sets and just as many PCs. I already have a wire going up to the 5th floor (out of 9). Works great, but only after 1 am, and only because energy-conscious Italians always switch off their gear at night.

73

N1JPR/I2

1719. Re: Radial Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 09:42:29 UTC
From: "Carl R. Stevenson" <wk3cqth@wk3c.com>
Message-ID: <VAqdnXII__9PEoHcUSdV9g@ptd.net>
Source record: 91040

"W8LU" <w8lu@semdxa.org> wrote in message
news:b2gch0h1rnrrkaq13cmmq68vc17dfauf1l@4ax.com...
> I'm looking for a source of radial wire. Possibly I can order over
> the internet. Do you have any suggestions?
> Tnx es 73 de Ken, W8LU

I went to one of the local electrical supply places (where the electrical contractors buy their stuff) and found them quite willing to sell me high-quality ground rods, wire in bulk, PVC conduit for underground cable runs, etc.

I bought 1500 ft. of #12 black insulated solid wire for a very reasonable price. (I'm putting down 32 33ft. radials for a 5BTV, with a ground plate from DX Engineering.)

Check around ... not all of the large distributors will sell to the public, but many will - at wholesale prices.

73,
Carl - wk3c

1720. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 15:38:07 UTC
From: "aunwin@insightbb.com"
Message-ID: <zf5Tc.143675$eM2.53133@attbi_s51>
Source record: 91041

My luck was good today I got a R/C car at a local garage sale for $10 which
has a 49 megHzs control frequency so I need not be concerned with CB
stations. i suspect rerceivers are interchangeable if needs be tho just
using an aproach transmitter and measuring activation distances.
I am beginning to see this as a viable comparison test that could be used at
a club meet
Cheers and beers
Art
"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:4QVSc.114239$8_6.109732@attbi_s04...
> Well I opened the parcel to check things out
> The frequency is 27.5 MHZ and is to be flown in an area
> with 200 feet from obstructions such as trees. It will land when beyond
> range of transmitter
> Art
> "Fred Hambrecht Sr - Gilbert News" <w4jle@w4jle.com> wrote in message
> news:TeVSc.107$6G.12@fe39.usenetserver.com...
> > The correct air craft control freqs are in the 72 Mhz band, 75 is used
> only
> > for ground vehicles ie. cars, boats etc.
> >
> > As a ham you may use any ham freq IAW amateur regs.
> >
> > "Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
> > news:cfgihphoq1@newshost.mot.com...
> > >
> > > "aunwin@insightbb.com"
> > > In the US, 27 MHz is a hazardous frequency to be on...don't know
about
> > > elsewhere. Good units are in the 75 MHz range.
> > >
> >
> >
> >
> >
>
>

1721. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 15:46:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1gnph0lluv9qdqt9ra7gpg3l1uv1li2u66@4ax.com>
Source record: 91042

On 13 Aug 2004 02:16:01 -0700, n1jpr@hotmail.com (SpamHog) wrote:
>On the TOP of my building there's a 50 ft steel lattice tower
>(HF/VHF/UHF beams) and a tornado-proof 20 ft dish (1/2 kW UHF
>moonbounce). They are some 80ft apart, both grounded.

Now how did I suspect that?

>Right now, I still have no real grounding in my flat - I just have a
>virtual ground connecting all the conductive material in the shack,
>which does help reduce noise and hazards. I intend to at least bring
>the wiring up to regulation. That won't help with lightning safety,
>though.

Well, let's put some closure to this thing called ground. For much of discussion, ground is actually a large pool of excess charge that is highly mobile. That is, you can draw on its charge without significantly polarizing it. When you can't, you get electrical discharges (ground under a threatening sky becomes polarized and lightning occurs). In some sense, the bulk of this metal satifies this criteria, in other senses it does not.

Insofar as RF ground, anything, even earth, which is a signficant distance (in terms of wavelength) away presents a situation in which it is isolated and a problematic reference. In this situation, you can conspire through tuning mechanisms to optimize that path to be a good conductor (series resonate the lead going there); this works for RF but for lightning that is another matter (and at different frequencies simultaneously).

>I intend to string the T2FD between the fixed part of the tower
>(~40ft) and the base of the dish. I could use either for grounding,
>but I'd opt for grounding at the dish, which is right atop my place.

Your need for ground when you are using a dipole is unwaranted in terms of RF. Where would you connect it anyway? A dipole, by definition is self complimentary. However, the surrounding metal is certainly a disturbance to the self. Make sure the ends stand off from the supports by a good amount - I can only guess, and that would be 10 feet.

>
>This is a bad neighborhood. Nuke blasts are an almost daily
>occurence. As they are not meant for testing purposes, I am afraid the
>NTB treaty does not apply. Also, there's a known focus of Al Qaeda
>activity just a mile away (go to www.tuttocitta.it and plonk in Milano
>/ Viale Jenner 50) but it can't be closed because it would hurt

>certain people's sensitivities. I wear lead pants all the time.
>
>
>
>> >IV. Also, I'd like to avoid as much as possible any hums that may
>> >derive from poor double grounding. After all, we mostly do HAVE to
>> >ground stuff inside the shack as well, for electrical safety.
>>
>> Anticipating what follows, perhaps you should simply loop couple all
>> of that steel at the top of the building. No ground issue there. No
>> direct connections. No HV problems.
>
>Please elaborate. Do you mean turning the warship atop my bldg into a
>ground reference loop?
>
>
>
>> >2) Ground the middle of the high-Z winding to the locally available
>> >ground. NOT ground the low-Z winding - I'll just connect it to the
>> >coax.
>>
>> Here is where the part about doing it right raises its ugly head.
>> Ground is not simply a matter of being bulk metal. At least not RF
>> ground, and not always safety ground.
>
>Well, not exactly.
>
>A large bulk of metal is usually a pretty good capacitive sink at HF.
>In fact, even an insulated structure works decently as a RF ground. I
>even built crystal radios in which very few square inches of sheet
>metal were enough to provide a cap sink that had a large effect when
>worked against a wire antenna.
>
>As for safety ground, NEVER "assume" that a bulk of metal is grounded.
>If you did, you could easily be found guilty of manslaughter in court.
>In some jurisdictions you have to get an an electrician to sign you
>off that, among other things, a piece of eqpt is properly grounded.
>
>In professional radio installations, one sees a "ground reference"
>system which is indeed DC-grounded, but for RF purposes, most of the
>sink effect comes from strapping together everything in sight,
>including cabinets, metal furniture, building structures, drains,
>floor support etc etc.
>
>
>
>> >Route internal wires for maximum insulation. Fill the balun
>> >case with either epoxy or urethane foam. Keep the two leads (coax,
>> >ground) well separated.
>>

>> This is more a matter of cosmetics and personal preference than
>> engineering consideration.
>
>I would like to maximize the chance that any burst of energy will take
>the ground path rather than the coax path. Why should putting, say,
>3kV insulation between the antenna and the coax not matter?
>Incidentally, you do find kV-range insulation in commercial products
>as well.
>
>
>
>> Lead dressing is adequate and mounting
>> does the rest.
>
>What do you mean?
>
>
>
>> >3) Insert EMP dischargers right into the balun:
>> >- One across the high-Z winding, for transversal mode.
>> >- One between each high-Z lead and ground, for common mode.
>> >- One across the low-Z winding, a'shunt the coax, for
>> >transversal-mode.
>> >And also one across the top resistor, also for transversal.
>>
>> The resistor is already going to snub any "EMP" the rest is window
>> dressing. It takes quite a few KV to jump an inch.
>
>So it snubs any EMP but not an RF signal. What is the spectrum of an
>EMP? Is it more like DC or more like all across the RF spectrum?
>
>
>
>> >4) Put one or more large iron-core chokes on the coax, as to dampen
>> >EMP that could possibly travel on the outside of the coax shield.
>> >(This would also ensure that RF power or noise will not travel on the
>> >outside of the shield, of course)
>>
>> 8 turns of 6 inch diameter loops will do just as well, as would a
>> simple 1:1 Current BalUn. You are too much concerned with Nuclear
>> Blast. If you suffer EMP, you've got far more to worry about.
>
>Now I understand. FYI, what gets you in a lightning near-hit _is_ an
>EMP.
>
>I once had an audible arc in an antenna due to a 1-lightning
>thunderstorm. That single hit happened in the midst of a city, and
>took out several power stations and countless other equipment. My
>antenna was 8 miles away.
>

>
>
>> >a) For HV DC insulation in the balun, I intend to use as large a
>> >PVC-insulated conductor as I can fit, wind the high-Z winding, wrap it
>> >in insulating tape, and wind the low-Z winding on the top of the
>> >insulating layer.
>> >- PVC is said to be lossy. Is it a dramatic loss or not?
>> >- What tape should I use?
>> >- Is the insulated core of a coax a decent alternative to HV wire?
>> >- What is the implication of making a low-Z winding ATOP the high-Z
>> >one & the insulating layer, instead of interleaving them?
>>
>> 10W is not going to generate any potentials to offer such prospects of
>> arc or corona - unless you are constructing a very small loop or
>> dipole. You have already described you are using a T2FD which
>> obviates that headache.
>
>Great! But what about losses?
>
>I NEVER saw baluns with windings atop each other
>- they were always directly wound on the core.
>And I don't know why.
>
>
>> >b) For receiving, small 90V neon bulbs should already provide some
>> >protection.
>>
>> And maximum noise generation if they should ever fire. How's that
>> going to happen? Is this massive metal structure at the top of your
>> building an AM transmitter tower with a 50KW signal?
>
>Nothing but EMP. Lightning arrestors, if not MOV, are mostly gas
>discharge devices. All of yesteryear's professional toob radios and
>many consumer ones included a tiny neon lamp in their front end.
>
>
>> >c) For the coax shield choke, I am considering 20 tight turns on a
>> >5in. plastic pipe,
>> >the steel core being made with pieces of thin,
>> >insulated rebar - enough to fill the pipe.
>>
>> Excessiveï¿½
>
>OK!
>
>
>> >- Any reason to vote for either major party candidate in the coming
>> >election?
>>
>> Vote Status Quo and wait for the night of the Long Knives.

>
>OK! Will do.
>
>
>
>> >- Any reason to use FLAT steel instead of cheap, easy to find rebars?
>> Lead may help with the issues of thermonuclear events.
>
>Great! But lead will lead to lead poisoning litigation too.
>
>I don't want to litigate a lead-poisoned nuclear-armed jihadi.
>
>Lead poisoning is also rumored to lead people to insanity
>- see Goya (the painter, not the beans).
>
>So, I don't want to litigate a lead-poisoned nuclear-armed
>totally-out-of-his-mind jihadi either.
>
>
>
>> In fact, you would probably get just as
>> good a signal out if you simply ran 20 feet of coax to a 100 foot wire
>> going up and tying off (or not) to all this metal.
>
>I had thought about that too, esp. for LF! Problem is, between moi
>and the warship up on top lie crouching and waiting a few tens of TV
>sets and just as many PCs. I already have a wire going up to the 5th
>floor (out of 9). Works great, but only after 1 am, and only because
>energy-conscious Italians always switch off their gear at night.
>
>73
>
>N1JPR/I2

1722. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 16:48:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <igoph0htvasmit1m5smn1b556oqkpjrika@4ax.com>
Source record: 91043

A rather more complete treatment than the last sent:

On 13 Aug 2004 02:16:01 -0700, n1jpr@hotmail.com (SpamHog) wrote:
>On the TOP of my building there's a 50 ft steel lattice tower
>(HF/VHF/UHF beams) and a tornado-proof 20 ft dish (1/2 kW UHF
>moonbounce). They are some 80ft apart, both grounded.

Now how did I suspect that?

>Right now, I still have no real grounding in my flat - I just have a
>virtual ground connecting all the conductive material in the shack,
>which does help reduce noise and hazards. I intend to at least bring
>the wiring up to regulation. That won't help with lightning safety,
>though.

Well, let's put some closure to this thing called ground. For much of discussion, ground is actually a large pool of excess charge that is highly mobile. That is, you can draw on its charge without significantly polarizing it. When you can't, you get electrical discharges (ground under a threatening sky becomes polarized and lightning occurs). In some sense, the bulk of this metal satisfies this criteria, in other senses it does not.

Insofar as RF ground, anything, even earth, which is a significant distance (in terms of wavelength) away presents a situation in which it is isolated and a problematic reference. In this situation, you can conspire through tuning mechanisms to optimize that path to be a good conductor (series resonate the lead going there); this works for RF but for lightning that is another matter (and at different frequencies simultaneously).

>I intend to string the T2FD between the fixed part of the tower
>(~40ft) and the base of the dish. I could use either for grounding,
>but I'd opt for grounding at the dish, which is right atop my place.

Your need for ground when you are using a dipole is unwarranted in terms of RF. Where would you connect it anyway? A dipole, by definition is self complimentary. However, the surrounding metal is certainly a disturbance to the self. Make sure the ends stand off from the supports by a good amount - I can only guess, and that would be 10 feet.

Now, down in the shack you still have the same problem of ground being far away in terms of wavelength for RF. However, you are still using a dipole and the dipole is going to force its own relationships with the nearby structures. Presumably the T2FD will smooth out those wrinkles. Insofar as safety ground goes, it is hard to believe that

is not supplied in your apartment - somewhere. Further, with regard to lightning, you are probably already living inside a faraday shield (the building's steel, skeletal structure), but make sure you ground the coax coming into the apartment at the window or where it penetrates a wall. To answer my earlier question, connect the coax shield to the building frame before it begins its descent to your apartment.

>> Anticipating what follows, perhaps you should simply loop couple all
>> of that steel at the top of the building. No ground issue there. No
>> direct connections. No HV problems.
>
>Please elaborate. Do you mean turning the warship atop my bldg into a
>ground reference loop?

Think of a Gamma or Delta match. Although these connect to the metal of the structure they drive, they are inductive loops. You could as easily build the loop and place it in close proximity to the structure to accomplish the same thing. This gives you isolation except for the frequency the loop is tuned to (and would limit you to a narrow band of operation unless you have some means to remotely tune it).

>... for RF purposes, most of the
>sink effect comes from strapping together everything in sight,
>including cabinets, metal furniture, building structures, drains,
>floor support etc etc.

Suffice it to say it is adequate.

>I would like to maximize the chance that any burst of energy will take
>the ground path rather than the coax path. Why should putting, say,
>3kV insulation between the antenna and the coax not matter?

It is based on hope.

>Incidentally, you do find kV-range insulation in commercial products
>as well.

Much of that is simply opportunistic and chance given the insulation is suited to other purposes, like holding things together as a framework made out of plastic.

>> Lead dressing is adequate and mounting
>> does the rest.
>
>What do you mean?

Keeping leads apart and away from conductive structures replaces all the exotic insulation you could imagine. Besides, if we are talking about your T2FD and coax, I cannot imagine this is a problem in the first place. You are going to want to drive the coax shield to ground as soon as possible, not isolate it with insulation. You are going to want to isolate the T2FD ends, but any induced potentials will have to

reckon with the built in resistor snubbing them. Such potential does not merit heroic insulation efforts.

>So it snubs any EMP but not an RF signal. What is the spectrum of an >EMP? Is it more like DC or more like all across the RF spectrum?

It is mostly Pulsed DC with very little RF over 1MHz. The pulse shape is characteristically described as several ï¿½S rise and about 20 ï¿½S fall. If you consider the strike contains 100,000A and integrate this pulse over one second, then the duty cycle reduces this to 10 - 100 A.

This is not trivial, but neither is it catastrophic UNLESS that same current is trying to push its way through Z or R! Remember, lightning's source is an infinite constant current generator capable of supporting any potential necessary to maintain that strike level.

Consider this: You have a huge resistor of 1000 Ohms. You are within reach of one of its leads tied to ground. It is supporting 100,000A through it - hence there is 100 Million volts across it. You reach out and grab that lead going to ground. Are you going to be hit with that same gazillion volts? The ground lead presents all of 0.001 Ohm and with that same current, for 10's of ï¿½S you feel the tingle of 100V - Maybe. Your body resistance is easily 1-10 KOhms and the current of that 100V is enough to kill you if sustained (10's of ï¿½S hardly qualifies) but probably a burning pin-prick sensation. If we convert this burn into power, it renders you sinking (or simmering) 100 mW-seconds. In equivalent heat experience, this is like grabbing a Christmas tree bulb (the big ones) for a hundredth of a second.

>Now I understand. FYI, what gets you in a lightning near-hit _is_ an >EMP.
>
>I once had an audible arc in an antenna due to a 1-lightning >thunderstorm. That single hit happened in the midst of a city, and >took out several power stations and countless other equipment. My >antenna was 8 miles away.

You heard the arc. That is an expression of power. This power conversion is easily measured in the microwatts. It may sound loud, but hearing is deceptive because it is subjective.

Still and all, microwatts for the front end of a receiver can be overpowering. You can rest assured that this power was generated due to the current encountering either Z or R such that it was absorbed by the heat conversion.

>Great! But what about losses?
>
>I NEVER saw baluns with windings atop each other
>- they were always directly wound on the core.
>And I don't know why.

To maintain a wide bandwidth and to preserve balance.

>All of yesteryear's professional toob radios and
>many consumer ones included a tiny neon lamp in their front end.

I have repaired many such sets, professional and consumer alike. Yes, some included the NE-2. That practice was discarded just as many years ago too. There are probably a billion TVs out there, and not one of them with this kind of protection.

Returning to the issue of lightning, I would suggest you mine the archives of rec.radio.amateur.antenna for Richard Harrison, KB5WZI for thousands of commercial and amateur tower installations over a career spanning 50 years. He also discusses feedlines and lightning.

73's
Richard Clark, KB7QHC

1723. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 17:00:06 UTC
From: radio-operator@telus.net
Message-ID: <d318809e.0408130900.20b837b3@posting.google.com>
Source record: 91044
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

Thank-you so much for the feedback and information thus far.

Although I really appreciated the information, I do not want to get too hung up on the coiling of the coax. This weekend I plan to upgrade the gauge of the wire from #8 to #3. Also I have now bonded the cold water pipe entering in the basement floor to the exterior ground plate.

Any other feedback on the pictures below are appreciated......

Lloyd

- 3 ground rods 10' each around the tower (bonded together)
- 2 ground plates (one outside, one in the shack, also bonded together)
- lightning arrestors and/or feedthrough adapters
- tower to mast ground
- interior coax switch (not shown)

I provided some pictures below:

http://www.telusplanet.net/~homac/exteriorground01.JPG

http://www.telusplanet.net/~homac/exteriorground02.JPG

http://www.telusplanet.net/~homac/exteriorground02a.JPG

http://www.telusplanet.net/~homac/exteriorground03.JPG

http://www.telusplanet.net/~homac/exteriorground04.JPG

http://www.telusplanet.net/~homac/interiorground01.JPG

http://www.telusplanet.net/~homac/interiorground02.JPG

"Jack Painter" <223bthp@cox.net> wrote in message news:<9WQSc.16277$Yf6.6584@lakeread03>...
> Reasons not to create a coiled-coax "choke"
>
> http://www.comm-omni.com/polyweb/hamradio5.htm
> Even though inductive properties of the coax cable appear to be
> beneficial, and some extra inductance can be created by adding
> a few turns to the coax; don' t do it. The added turns can also
> act like an air wound transformer that can couple more energy
> into the line. This is just the opposite of the desired effect.
> Instead, make sure that coax lines leaving the tower remain at
> right angles to the magnetic field surrounding the tower.

>
> http://www.wrblock.com/Papers/Amatuer_Radio/APARS_P09.htm
> Neatness counts - cables (transmission lines, power (ac and dc),
> speaker, microphone, computer, control) should be cut to length
> and routed neatly and cleanly between boxes using the most direct
> practical route. The coiling of excess cable length on the
> protected side should be avoided since it could act as an air-wound
> transformer coupling magnetic energy from a nearby lightning strike
> back into the protected equipment.
>
> http://www.marcspages.co.uk/tech/2100.htm
> Some in the RF industry would have seen coils used as static drains.
> The theory is the coil is high impedance at RF and so looks open
> circuit, whilst still presenting a short to the DC and draining it
> to deck. The problem with them is they too can start reacting
> ('scuse the pun!) with the capacitance present on the system,
> especially at the lower ends of the band.
>
>
> 24hr ops FULL COVERAGE PROTECTION (no "chokes")
> http://users.erols.com/n3rr/lightningprotection/
>
> http://www.alvarion.com/RunTime/Materials/PDFFiles/Lightning_Protection_White_Paper_Marc
h31_R41.pdf
> ALVIRON SUBSCRIBER SYSTEMS TOWER LIGHTNING PROTECTION
> (no "chokes")
>
> And one major US communications company which drawings and specs
> are confidential and proprietary information - but they do NOT use
> any kind of coiled-coax and prohibit same from all systems.
>
> Here's one exception - from an Amplifier and relay company - they
> are NOT in the lightning protecton business and this is very
> outdated advice, but shown anyway becasue we're honest!
>
> http://www.ameritron.com/ameritron/man/pdf/RCS-4.pdf
>
> We strongly recommend the use of lightning retarding loops
> in the coaxial cables near the relay box (see illustration).
> Remember that lightning travels through the path of least
> resistance. Station ground leads should be solid, large surface
> area conductors. Do not use braided or stranded wire for the
> ground leads. Avoid sharp bends in the ground leads. Use
> multiple ground rods and/or radials to provide the earth
> termination.
> ---
> Recommend you ignore this and maintain direct paths - JP
>
> Finally, Richard Clark's mention of "code" is pretty important. Reference
> the NEC-70 and NFPA-780 for US installations.

>
> Jack Painter
> Virginia Beach VA
> http://members.cox.net/pc-usa/station/grounding.htm

1724. VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 17:19:43 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <411CF82F.4000402@psu.edu>
Source record: 91045

Possible Dummy alert here!

I'm trying to understand VSWR a bit more here. As I recently put up my first non-ladder line antenna, VSWR has suddenly become important to me. 8^)

This isn't so much about the antenna, which is performing okay so far, if a little high on 80 meters.

More it is about a tuner's habit of showing a higher VSWR as the power level is increased.

I have read that this is not the case. VSWR does not change with power level, and that something is wrong with the VSWR meter, but what would be wrong with the meter, and more importantly, *which* is correct, my low power or high power, and how do I find out?

My Rig VSWR meter and my tuner meter read fairly close at the low end, but diverge at the high end. But both read higher VSWR than at low power. so that isn't a help.

I do have another VSWR meter, but at this point I suspect that adding another variable will just further confuse me! 8^P

Anyone have an explanation?

- Mike KB3EIA -

1725. Icom 229H help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 17:40:43 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <v27Tc.170183$wH4.10827647@twister.southeast.rr.com>
Source record: 91049

Does an Icom 229H use an internal battery. If so what happens if the battery dies.

1726. Re: SWR meter kaput?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 17:44:15 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <P57Tc.170184$wH4.10827859@twister.southeast.rr.com>
Source record: 91046

"Thomas" <nospam@nospam.com> wrote in message
news:10hc8njhtreuh89@corp.supernews.com...
> Recently started to renew my interest in ham radio and so pulled out
> some old equipment.
>
> I set up a temporary antenna yesterday and connected it to my rig,
> including an MFJ Versa Tuner II (Model MFJ-949D), purchased about 15
> years ago.
>
> Setting the transmitter (Icom-725) to low output power (about 10W) I
> closed the CW key and the tuner indicated about 15W of forward power,
> and no reflected power. That is, it "indicated" a SWR of 1:1.
> Unlikely, to say the least.
>
> The reflected power meter just doesn't move at all. Regardless of band.
> Thus, I am convinced that something is wrong with it (it has been
> moved twice since purchase). I did open the case and nothing looks out
> of order. Touching the reflected meter terminals with an ohm meter
> causes the reflected meter needle to jump, so it appears that the meter
> itself is working.
>
> The antenna seems to work very well for receiving. And I am able to
> "get out", as it were. I can hear myself on a little SW radio I have at
> 14.2 MHz in AM.
>
> Questions:
>
> Any thoughts as to where to look for the "problem" with the tuner?
>
> Is there another way to determined SWR with just the meters on the
> transmitter (RF power out) and the forward power meter on the tuner?
>
> Thanks in advance.
>
> 73s,
>
> Thomas
>
Proly a bad switch or pot. Try a little switch juice.

1727. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 17:54:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pumkh0h5pmo9ssgb2cqpa805hja3tr30q7@4ax.com>
Source record: 91047

On Fri, 13 Aug 2004 13:19:43 -0400, Mike Coslo <mjc5remove@psu.edu>
wrote:

> Anyone have an explanation?

Hi Mike,

Meters display an error as a percentage of the full scale. This means
that 10% of 100W full scale is a 10W margin ANYWHERE on the scale.
Needless to say that if you are down at the 10W end of the scale, the
actual error is ï¿½100%. If you are up at the 100W end of the scale, it
is ï¿½10%. Hence there is the possibility that the SWR is the same, but
the error introduced at the low reading does not track with the high
reading.

Moral: Always adjust instruments to indicate full scale readings.

73's
Richard Clark, KB7QHC

1728. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 17:56:25 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <dh7Tc.15426$nx2.11298@newsread2.news.atl.earthlink.net>
Source record: 91048

> More it is about a tuner's habit of showing a higher VSWR as the power
> level is increased.
>
> I have read that this is not the case. VSWR does not change with power
> level, and that something is wrong with the VSWR meter, but what would
> be wrong with the meter, and more importantly, *which* is correct, my
> low power or high power, and how do I find out?
>
> My Rig VSWR meter and my tuner meter read fairly close at the low end,
> but diverge at the high end. But both read higher VSWR than at low
> power. so that isn't a help.
>
> I do have another VSWR meter, but at this point I suspect that adding
> another variable will just further confuse me! 8^P
>
> Anyone have an explanation?

Simple. This has been discussed many times. The diodes are nonlinear and when on the low end of the voltage across them, they conduct differant.

To get the best indication of swr use the larger ammount of power. You can use the lowest ammount of power to adjust the tuner for the lowest indicated SWR . That will not matter. It is just the most accurate swr will be seen by the meter at a higher power level.

If you use a directional wattmeter that has a wattage scale and calculate the swr , it should be the same at all power levels provided the meter is accurate.

1729. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 18:16:06 UTC
From: Red Noise <RN@random.net>
Message-ID: <Gz7Tc.37739$xk.25970@fed1read01>
Source record: 91050

A good rundown on VSWR at the ARRL site -- URL:
http://www.arrl.org/tis/info/pdf/9401070.pdf

--
Red Noise
==========
"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:411CF82F.4000402@psu.edu...
> Possible Dummy alert here!
>
> I'm trying to understand VSWR a bit more here. As I recently put up my
> first non-ladder line antenna, VSWR has suddenly become important to me.
8^)
>

1730. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 18:22:44 UTC
From: "Dee D. Flint" <deeflint01@comcast.net>
Message-ID: <C_GdnS-ufKStmoDcRVn-ow@comcast.com>
Source record: 91051

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:411CF82F.4000402@psu.edu...
> Possible Dummy alert here!
>
> I'm trying to understand VSWR a bit more here. As I recently put up my
> first non-ladder line antenna, VSWR has suddenly become important to me.
8^)
>
> This isn't so much about the antenna, which is performing okay so far,
> if a little high on 80 meters.
>
> More it is about a tuner's habit of showing a higher VSWR as the power
> level is increased.
>
> I have read that this is not the case. VSWR does not change with power
> level, and that something is wrong with the VSWR meter, but what would
> be wrong with the meter, and more importantly, *which* is correct, my
> low power or high power, and how do I find out?
>
> My Rig VSWR meter and my tuner meter read fairly close at the low end,
> but diverge at the high end. But both read higher VSWR than at low
> power. so that isn't a help.
>
> I do have another VSWR meter, but at this point I suspect that adding
> another variable will just further confuse me! 8^P
>
> Anyone have an explanation?
>
>
> - Mike KB3EIA -
>

I think it is a simple case of the meter being somewhat less accurate at the
low power levels and different meters having different levels of accuracy.
I've used a number of meters and all have given a different reading at 10
watts than 100 watts. So I tune at low power and then give it a quick touch
up adjustment at the power I intend to operate.

Dee D. Flint, N8UZE

1731. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 19:28:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411d1793_5@corp.newsgroups.com>
Source record: 91052

Mike Coslo wrote:
> More it is about a tuner's habit of showing a higher VSWR as the
> power level is increased.

The SWR meter's diode(s) forward voltage drop(s) has(have) to be
overcome before the SWR meter reading is accurate. Also, high
power may cause impedance changes due to heating.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1732. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 20:34:33 UTC
From: richardharrison@webtv.net
Message-ID: <14871-411D25D9-21@storefull-3257.bay.webtv.net>
Source record: 91053

Mike Coslo wrote:
"More it is about a tuner`s habit of showing a higher VSWR as the power level is increased."

Standing wave ratio (SWR) is often called "voltage standing wave ratio to distinguish it from the standing-wave ratio expressed as a power ratio which is (Emax / Emin)squared' (From Terman`s 1955 edition footnote on page 97).

SWR is a measure of the amplitude ratio of the reflected to incident waves at the load. It`s a means of expressing the reflection coefficient.

SWR is independent of power level or of transmission line length on an ideal line. Just as a speedometer doesn`t require driving a mile or for an hour for a valid mph reading, an SWR meter doesn`t require any particular line length to present a valid mismatch reading at the transmission line load, despite reasonable objections by Reg Edwards. The degree of mismatch can be indicated by an SWR meter in the usual case.

Power level is not an SWR factor but often plays a role in the indication of SWR as well reported by Mike Coslo and his respondents.

Best regards, Richard Harrison, KB5WZI

1733. testing only. tnx

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 21:04:36 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <E1aTc.10666$jZ5.2973@clgrps13>
Source record: 91054

test

1734. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 21:22:25 UTC
From: richardharrison@webtv.net
Message-ID: <19863-411D3111-5@storefull-3255.bay.webtv.net>
Source record: 91055

Richard Clark, KB7QHC wrote:
"(don`t fall for the monster under the bed stories of gazillion volts at a bajillion amps)."

Good point! It`s akin to: "You can`t protect against a direct hit!"

Oh yeah? How about 10,000 medium-wave broadcast stations struck by nearly every charged cloud passing overhead? Sometimes several times a minute for a long time period. The listener is often unaware of the instantaneous carrier drops to extinguish the arcs initiated by the lightning strikes. And, one of the most important lightning opponents is a large coil of large wire in each tower lighting wire at the base of the tower. It keeps lightning as well as R-F out of the electrical service to the station.

If tower lighting chokes stepped up the lightning, they would all be replaced with Austin transformers or some other technique such as shunt feed of the radio towers to eliminate the base insulator. Truth is, lighting chokes are very effective at keeping lightning out of the power supply.

Best regards, Richard Harrison, KB5WZI

1735. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 21:53:29 UTC
From: richardharrison@webtv.net
Message-ID: <19861-411D3859-110@storefull-3255.bay.webtv.net>
Source record: 91056

Jerry Martes wrote:
"Is it clear to you what this array of two CP antennas will be used for?"

I hope not fo promote terrorism, but I`m not judging the merits of application nor advising anyone to break the law. I only advised how to feed the antennas in phase as need be for radiation to be aiding around the 360-degrees. As for circular polarization, I would refer any reader to "Antennas" by J.D. Kraus.

Best regards, Richard Harrison, KB5WZI

1736. AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 22:27:48 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <EfbTc.7425$54.112703@typhoon.sonic.net>
Source record: 91057

I live approx 80 miles from the xmitter of station WABC (New York) 50,000 watts. During the day my reception is good-to-very good. After sunset however, the signal is poor to unlistenable -- due to fading and man-made QRM. The stations night-time signal is directional but I live in the direction of the major lobe. The station advertises covering 27 eastern US states at night -- which I don't doubt.

I can receive a Boston station (WBZ, 50k watts) and a Charlotte, NC station (WBT, 50k watts)at night loud and clear. Both of these hundreds of miles from me. (Also get WJR in Detroit and WLS in Chicago loud & clear.)

I seem to be in a "shadow" for the relatively close WABC. I'm using a high quality (Sangean) table radio with a built-in ferrite loop antenn. Any suggestions for improving my WABC night time reception??

Dave Pitzer
==========

1737. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 23:21:30 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <_1cTc.964$io1.547@nwrddc02.gnilink.net>
Source record: 91058

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:19861-411D3859-110@storefull-3255.bay.webtv.net...
> Jerry Martes wrote:
> "Is it clear to you what this array of two CP antennas will be used
> for?"
>
> I hope not fo promote terrorism, but I`m not judging the merits of
> application nor advising anyone to break the law. I only advised how to
> feed the antennas in phase as need be for radiation to be aiding around
> the 360-degrees. As for circular polarization, I would refer any reader
> to "Antennas" by J.D. Kraus.
>
> Best regards, Richard Harrison, KB5WZI

Richard I've been amusing myself by trying to develop an antenna that "receives" RHCP polar orbiting satellites. The coverage I trying to obtain would suffer from the stacking refered to in this thread.
And, it seems so obvious that feeding the two antennas in phase would produce maximum gain on the horizon, that I thought there was some special requirement for this antenna's pattern.
In addition, I have assumed that the impedance mismatch for receiving antennas can be allowed to be much greater than for transmitting. This statement is directed to the fact that transmission line loss is increased by VSWR, and the reciever isnt restricted to being the same impedance of the transmission line.

Jerry

1738. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 23:27:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <A7cTc.980$io1.365@nwrddc02.gnilink.net>
Source record: 91059

"Dave Pitzer" <dpitzer@sonic.net> wrote in message
news:EfbTc.7425$54.112703@typhoon.sonic.net...
> I live approx 80 miles from the xmitter of station WABC (New York) 50,000
> watts. During the day my reception is good-to-very good. After sunset
> however, the signal is poor to unlistenable -- due to fading and man-made
> QRM. The stations night-time signal is directional but I live in the
> direction of the major lobe. The station advertises covering 27 eastern US
> states at night -- which I don't doubt.
>
> I can receive a Boston station (WBZ, 50k watts) and a Charlotte, NC
station
> (WBT, 50k watts)at night loud and clear. Both of these hundreds of miles
> from me. (Also get WJR in Detroit and WLS in Chicago loud & clear.)
>
> I seem to be in a "shadow" for the relatively close WABC. I'm using a high
> quality (Sangean) table radio with a built-in ferrite loop antenn. Any
> suggestions for improving my WABC night time reception??
>
> Dave Pitzer
> ====================================
Dave

I'm curious about a similar situation. in California. Are you able to
receive the stations equally well, or poorly, with the radio oin a car at
this location?

Jerry

1739. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-13 23:44:40 UTC
From: "aunwin@insightbb.com"
Message-ID: <IncTc.250953$%_6.199167@attbi_s01>
Source record: 91060

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:_1cTc.964$io1.547@nwrddc02.gnilink.net...
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:19861-411D3859-110@storefull-3255.bay.webtv.net...
> > Jerry Martes wrote:
> > "Is it clear to you what this array of two CP antennas will be used
> > for?"
> >

>snipJerry
I am presently working with circular polarised antennas for transmit,
These antennas are omnidirectional but does produce a choice of TOA
What exactly is the pattern that you are looking for?
I do not have any knoweledge of satellite work needs
Regards
Art

snip

1740. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 01:08:12 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <%BdTc.247577$a24.203003@attbi_s03>
Source record: 91061

Richard Harrison wrote:
> Richard Clark, KB7QHC wrote:
> "(don`t fall for the monster under the bed stories of gazillion volts at
> a bajillion amps)."

It's not a monster under the bed. But it is a heaven of a blast!

The actual USAF specification for lightning strikes is based on a
probability model.

It's been 20 years since I read the actual wording, but the values are;

90% of all lightning strikes in the USA are described as falling within
the spectrum defined by a strike with the following characteristics:

1) Double strike. First peak 100,000 amperes with a second strike of
50,000 amperes. Full Width Half Maximum [approximately 50% pulsewidth]
of 100 useconds for each peak.

2) Rise time from 0 to peak is 1 usecond on both strikes.

3) Fall time is a decaying exponential from peak to approximately 500
amperes sustaining current in the lightning channel for 300 milliseconds.

4) Electric field intensity prior to prestrike is greater than 10,000
volts per meter.

Conclusion: Lightning has lots of energy. Systems have been designed to
not only survive a direct strike but to operate through the direct
strike. All it takes is $$$$$$.

Note: 50% of all strikes use the same pulse width model but with a
reduced amplitude of 20,000 and 10,000 amperes for the peak values.

W1MCE
Program Chief Engineer, retired
USAF MX MIssile RS/RV, WS-118

1741. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 01:37:52 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <3tqqh0djf6pqpkilv13vr6a6tmpr76mmu1@4ax.com>
Source record: 91062

Art,

Without the radio signal from the transmitter, the receiver will
respond to noise and move the control servos to unpredictable
positions, pretty much always resulting in a crash. Modern PCM
receivers can be programmed to assume pre-set control positions in the
absence of the control signal. This will usually result in a crash.
I have hundreds of hours flying RC model aircraft.

Russ

On Fri, 13 Aug 2004 04:38:51 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Your knoweledge exceeds mine on this subject
>The instructions say it can take of and also land on at from hard surfaces.
>With two engines being in the contol positions of either on or off it would
>suggest that without power the plane will "glide" to a landing. this gliding
>after exceeding transmitter range does present distance measurement
>problems. Perhaps if the plane was weighted the landing could be more
>"precise" as you say
>but short of a "crash"
>Seems like toys holds interests of every one .
>Art
>"Silly Penguin" <SillyPenguin@SparkingWire.com> wrote in message
>news:411c304b@post.usenet.com...
>> **** Post for FREE via your newsreader at post.usenet.com ****
>>
>> A Unwin wrote:
>> > It will **land** when beyond
>> > range of transmitter
>>
>> Let's be precise - it will crash...
>>
>>
>>
>> -=-=-=-

1742. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 01:57:36 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <kkeTc.164$SR4.72@newssvr14.news.prodigy.com>
Source record: 91063

Jerry, just because you are wanting to recieve, instead of transmit, doesn't mean that the V.S.W.R. mismatch isn't there-- nor its effect on the subsequent coax loss's being multiplied because of the mismatch! Remember- the antenna , coax, and the mismatch are all bi-directional ! The additional loss in the feedline, because of a high swr, is also present in the recieve direction! If you have copy of ARRL handbook, or other sources, look under "transmission lines" - these have a chart of coax loss, and also the swr effect on that coax loss.
For example, coax with 4 dB loss, at swr of 1.5 /1 would raise the line loss by an extra .1 dB, while an swr of 3:1 would rais it by an extra dB, at 5:1, would add about 2.2dB loss! and- keep in mind this is BI-DIRECTIONAL loss ! Another consideration is that the noise figure is optimized for 50 ohm, and this (because of a mismatch), will also be negatively affected! Best to find good impedence match for all considerations-- Jim NN7K

Jerry Martes wrote:

<SNIP>
> In addition, I have assumed that the impedance mismatch for receiving
> antennas can be allowed to be much greater than for transmitting. This
> statement is directed to the fact that transmission line loss is increased
> by VSWR, and the reciever isnt restricted to being the same impedance of the
> transmission line.
>
> Jerry
>
>

1743. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 02:07:16 UTC
From: Roger Sparks <rsparks@elltel.net>
Message-ID: <411d73eb$1_1@corp.newsgroups.com>
Source record: 91064

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:411CF82F.4000402@psu.edu...
> Possible Dummy alert here!
>
> I'm trying to understand VSWR a bit more here. As I recently put up my
> first non-ladder line antenna, VSWR has suddenly become important to me.
8^)
>
> This isn't so much about the antenna, which is performing okay so far,
> if a little high on 80 meters.
>
> More it is about a tuner's habit of showing a higher VSWR as the power
> level is increased.
>
> I have read that this is not the case. VSWR does not change with power
> level, and that something is wrong with the VSWR meter, but what would
> be wrong with the meter, and more importantly, *which* is correct, my
> low power or high power, and how do I find out?
>
> My Rig VSWR meter and my tuner meter read fairly close at the low end,
> but diverge at the high end. But both read higher VSWR than at low
> power. so that isn't a help.
>
> I do have another VSWR meter, but at this point I suspect that adding
> another variable will just further confuse me! 8^P
>
> Anyone have an explanation?
>
>
> - Mike KB3EIA -
>
Hi Mike,

One possibilty for the higher readings is that the antenna is actually changing impedance at higher power levels. This happens when a loose connection changes resistance under higher current conditions, when vegatation contacts the antenna and changes condutivity under higher current conditions, and when corona or arcing occurs at higher voltage conditions but not at lower voltage conditions.

All of these conditions will usually indicate on the VSWR meter as a sudden jump in VSWR.

73, Roger, W7WKB

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1744. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 03:08:46 UTC
From: "aunwin@insightbb.com"
Message-ID: <2nfTc.147019$eM2.129866@attbi_s51>
Source record: 91065

Are you aware that we are talking ELECTRIC models
Art
"Russ" <carlzomer@hotmail.com> wrote in message
news:3tqqh0djf6pqpkilv13vr6a6tmpr76mmu1@4ax.com...
> Art,
>
> Without the radio signal from the transmitter, the receiver will
> respond to noise and move the control servos to unpredictable
> positions, pretty much always resulting in a crash. Modern PCM
> receivers can be programmed to assume pre-set control positions in the
> absence of the control signal. This will usually result in a crash.
> I have hundreds of hours flying RC model aircraft.
>
> Russ
>
> On Fri, 13 Aug 2004 04:38:51 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> >Your knoweledge exceeds mine on this subject
> >The instructions say it can take of and also land on at from hard
surfaces.
> >With two engines being in the contol positions of either on or off it
would
> >suggest that without power the plane will "glide" to a landing. this
gliding
> >after exceeding transmitter range does present distance measurement
> >problems. Perhaps if the plane was weighted the landing could be more
> >"precise" as you say
> >but short of a "crash"
> >Seems like toys holds interests of every one .
> >Art
> >"Silly Penguin" <SillyPenguin@SparkingWire.com> wrote in message
> >news:411c304b@post.usenet.com...
> >> **** Post for FREE via your newsreader at post.usenet.com ****
> >>
> >> A Unwin wrote:
> >> > It will **land** when beyond
> >> > range of transmitter
> >>
> >> Let's be precise - it will crash...
> >>
> >>
> >>
> >> -=-=-=-

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1745. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 03:11:55 UTC
From: "aunwin@insightbb.com"
Message-ID: <%pfTc.147043$eM2.107369@attbi_s51>
Source record: 91066

Don't they reduce power at night fall to prevent interference with other
stations
Art
"Dave Pitzer" <dpitzer@sonic.net> wrote in message
news:EfbTc.7425$54.112703@typhoon.sonic.net...
> I live approx 80 miles from the xmitter of station WABC (New York) 50,000
> watts. During the day my reception is good-to-very good. After sunset
> however, the signal is poor to unlistenable -- due to fading and man-made
> QRM. The stations night-time signal is directional but I live in the
> direction of the major lobe. The station advertises covering 27 eastern US
> states at night -- which I don't doubt.
>
> I can receive a Boston station (WBZ, 50k watts) and a Charlotte, NC
station
> (WBT, 50k watts)at night loud and clear. Both of these hundreds of miles
> from me. (Also get WJR in Detroit and WLS in Chicago loud & clear.)
>
> I seem to be in a "shadow" for the relatively close WABC. I'm using a high
> quality (Sangean) table radio with a built-in ferrite loop antenn. Any
> suggestions for improving my WABC night time reception??
>
> Dave Pitzer
> ====================================
>
>

1746. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 03:13:36 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <wsfTc.16701$Yf6.16567@lakeread03>
Source record: 91067

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:19863-411D3111-5@storefull-3255.bay.webtv.net...
> Richard Clark, KB7QHC wrote:
> "(don`t fall for the monster under the bed stories of gazillion volts at
> a bajillion amps)."
>
> Good point! It`s akin to: "You can`t protect against a direct hit!"
>
> Oh yeah? How about 10,000 medium-wave broadcast stations struck by
> nearly every charged cloud passing overhead? Sometimes several times a
> minute for a long time period. The listener is often unaware of the
> instantaneous carrier drops to extinguish the arcs initiated by the
> lightning strikes. And, one of the most important lightning opponents is
> a large coil of large wire in each tower lighting wire at the base of
> the tower. It keeps lightning as well as R-F out of the electrical
> service to the station.
>
> If tower lighting chokes stepped up the lightning, they would all be
> replaced with Austin transformers or some other technique such as shunt
> feed of the radio towers to eliminate the base insulator. Truth is,
> lighting chokes are very effective at keeping lightning out of the power
> supply.
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard, really glad to see you chime in. Even ignoring the few examples I found that argue against the choke concept, what was more relevant to me was that in poring over hundreds of documents lately, I can find no modern specification for coiling the coax at any point, high or low. Not in the NEC or NFPA, not in the descriptions and specs to nationwide antenna tower systems, and not in National Lightning Safety Institute, University of Florida or other acedemia writings of such protection systems. So what seems to remain, is its record of use, perhaps prominently at one time, without evidence that the design was ever effective. Remember that for 230 years science seemed to support the pointed lightning rod without really testing it against other attachment points. Now it is fairly well agreed that blunt-tip rods were sceintifically tested to do a much better job of attracting the leader that was headed for a given area anyway. Perhaps the colied coax chokes are just fading away due to no real evidence that they work, and some theory and maybe even feeble arguments that they could do harm. From an EMI standpoint, it's hard to argue the concerns. And from direct attachment, only a massive winding of very heavy conductor could slow down lightning (providing there was an arc-gap for it to take as an

alternate to that slowdown). Might be why the modern lighter cabling of todays proliferant towers find little usefulness for the concept - just as a possibility.

Best regards,

Jack Painter
Virginia Beach VA

1747. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 03:19:31 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <xbednTbJD68zGYDcRVn-tg@comcast.com>
Source record: 91068

"Russ" <carlzomer@hotmail.com> wrote in message
news:3tqqh0djf6pqpkilv13vr6a6tmpr76mmu1@4ax.com...
> Art,
>
> Without the radio signal from the transmitter, the receiver will
> respond to noise and move the control servos to unpredictable
> positions, pretty much always resulting in a crash. Modern PCM
> receivers can be programmed to assume pre-set control positions in the
> absence of the control signal. This will usually result in a crash.
> I have hundreds of hours flying RC model aircraft.

Off the wall question: What's the "butt-kickinest" high end radio these
days? PCM's been around for many years, anyone doing error correction, FEC,
Direct sequence spread spectrum?

1748. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 03:22:03 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <vzfTc.682$og.110@nwrddc04.gnilink.net>
Source record: 91069

"Jim - NN7K" <nn7kexk7zfg@sbcglobal.net> wrote in message
news:kkeTc.164$SR4.72@newssvr14.news.prodigy.com...
>
>
> Jerry, just because you are wanting to recieve, instead of transmit,
> doesn't mean that the V.S.W.R. mismatch isn't there-- nor its effect
> on the subsequent coax loss's being multiplied because of the mismatch!
> Remember- the antenna , coax, and the mismatch are all bi-directional !
> The additional loss in the feedline, because of a high swr, is also
> present in the recieve direction! If you have copy of ARRL handbook, or
> other sources, look under "transmission lines" - these have a chart of
> coax loss, and also the swr effect on that coax loss.
> For example, coax with 4 dB loss, at swr of 1.5 /1 would raise the line
> loss by an extra .1 dB, while an swr of 3:1 would rais it by an extra
> dB, at 5:1, would add about 2.2dB loss! and- keep in mind this is
> BI-DIRECTIONAL loss ! Another consideration is that the noise figure is
> optimized for 50 ohm, and this (because of a mismatch), will also be
> negatively affected! Best to find good impedence match for all
> considerations-- Jim NN7K
>
>
> Jerry Martes wrote:
>
> <SNIP>
> > In addition, I have assumed that the impedance mismatch for receiving
> > antennas can be allowed to be much greater than for transmitting. This
> > statement is directed to the fact that transmission line loss is
increased
> > by VSWR, and the reciever isnt restricted to being the same impedance of
the
> > transmission line.
> >
> > Jerry

Jim

I sure wouldnt argue with your findings. I guess this identifies my
sloppy engineering. I didnt think 4 Db was a tolerable feed line loss
under any but the most dire circumstances. I wonder what a ~3:1 VSWR would
do to add attenuation to feed line loss os, say 1 1/2 db.
To further identify my sloppyness, I cant distinguish zero db from 0.1 db.
It is even difficult for me to determine with any confidance the difference
between Zero db and 1 db.

What I'm getting at is -- I still contend that a receiver can tolerate some mismatches that arent tolerable in a sophisticated transmitting station. Richard Fry has pointed out how critical small mismatches are in FM transmitters. This original post referanced a FM transmitting antenna. It would be reasonable (to me) to assume this referanced antenna could have some rigid constraints if it was to be used for transmitting stereo FM. But, as a omniazimuth FM receiver antenna, the phasing might be fairly straightforward.

Jerry

1749. Re: VSWR Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 03:56:55 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <b4gTc.3441$QJ3.501@newssvr21.news.prodigy.com>
Source record: 91070

Roger Sparks wrote:

> "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> news:411CF82F.4000402@psu.edu...
>
>>Possible Dummy alert here!
>>
>>I'm trying to understand VSWR a bit more here. As I recently put up my
>>first non-ladder line antenna, VSWR has suddenly become important to me.
>
> 8^)
>
>>This isn't so much about the antenna, which is performing okay so far,
>>if a little high on 80 meters.
>>
>>More it is about a tuner's habit of showing a higher VSWR as the power
>>level is increased.
>>
>>I have read that this is not the case. VSWR does not change with power
>>level, and that something is wrong with the VSWR meter, but what would
>>be wrong with the meter, and more importantly, *which* is correct, my
>>low power or high power, and how do I find out?
>>
>>My Rig VSWR meter and my tuner meter read fairly close at the low end,
>>but diverge at the high end. But both read higher VSWR than at low
>>power. so that isn't a help.
>>
>>I do have another VSWR meter, but at this point I suspect that adding
>>another variable will just further confuse me! 8^P
>>
>>Anyone have an explanation?
>>
>>
>>- Mike KB3EIA -
>>
>
> Hi Mike,
>
> One possibilty for the higher readings is that the antenna is actually
> changing impedance at higher power levels. This happens when a loose
> connection changes resistance under higher current conditions, when
> vegatation contacts the antenna and changes condutivity under higher current
> conditions, and when corona or arcing occurs at higher voltage conditions
> but not at lower voltage conditions.

>
> All of these conditions will usually indicate on the VSWR meter as a sudden
> jump in VSWR.
>
> 73, Roger, W7WKB
Also, remember that diodes in your swr meter are NOT LINEAR, until the
voltage
across them reachs a certain "Point" (below that point, they respond
as a square law device - double the volts, QUADRUPLE the CURRENT! The
diodes are on the sampleing lines of your vswr meter, and measure
forward (current)!, and backwards current! It is as simple as: double
the power- quadruple the current flowing in the sampleing circuit! This
is a common problem with a diode at a lower power than it is designed to
handle-Jim NN7K

1750. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 04:12:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10hr48rd8en05c1@corp.supernews.com>
Source record: 90971

Jim - NN7K wrote:
>
>
> Jerry, just because you are wanting to recieve, instead of transmit,
> doesn't mean that the V.S.W.R. mismatch isn't there-- nor its effect
> on the subsequent coax loss's being multiplied because of the mismatch!
> Remember- the antenna , coax, and the mismatch are all bi-directional !
> The additional loss in the feedline, because of a high swr, is also
> present in the recieve direction!. . .

That's not quite correct.

The SWR on the line is determined solely by the transmission line impedance and the load impedance. When transmitting, the antenna is the load. When receiving, the receiver is the load. If the receiver and antenna have different impedances, the line SWR will be different when transmitting than when receiving.

Fiddling with the antenna or the antenna/feedline match won't have any effect at all on the line SWR. It will, however, have an effect on the strength of signal arriving at the receiver.

Roy Lewallen, W7EL

1751. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 04:15:14 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <mlgTc.6296$aH.1957@newssvr29.news.prodigy.com>
Source record: 90972

Jerry-- at your stated 1.5 dB loss coax, with a 3/1 vswr, the extra loss would be just under .7dB, but remember that the reflected mismatch, also will affect your recievers front end noise (factot/figure), most likely in a negative way (no way to calculate the impedence presented to your rcvr front end) also, remember that fm sensitivity (because of its nature) is not near as sensitive as cw/ssb (typical 2 meter rcvr can detect a signal below .01 microvolt cw - fm rcvr does good around .1 microvolt- 20 dB more sensitive! Something to think about-- jim NN7K

Jerry Martes wrote:

> "Jim - NN7K" <nn7kexk7zfg@sbcglobal.net> wrote in message
> news:kkeTc.164$SR4.72@newssvr14.news.prodigy.com...
>
>>
>>Jerry, just because you are wanting to recieve, instead of transmit,
>>doesn't mean that the V.S.W.R. mismatch isn't there-- nor its effect
>>on the subsequent coax loss's being multiplied because of the mismatch!
>>Remember- the antenna , coax, and the mismatch are all bi-directional !
>>The additional loss in the feedline, because of a high swr, is also
>>present in the recieve direction! If you have copy of ARRL handbook, or
>>other sources, look under "transmission lines" - these have a chart of
>>coax loss, and also the swr effect on that coax loss.
>>For example, coax with 4 dB loss, at swr of 1.5 /1 would raise the line
>>loss by an extra .1 dB, while an swr of 3:1 would rais it by an extra
>>dB, at 5:1, would add about 2.2dB loss! and- keep in mind this is
>>BI-DIRECTIONAL loss ! Another consideration is that the noise figure is
>>optimized for 50 ohm, and this (because of a mismatch), will also be
>>negatively affected! Best to find good impedence match for all
>>considerations-- Jim NN7K
>>
>>
>>Jerry Martes wrote:
>>
>><SNIP>
>>
>>> In addition, I have assumed that the impedance mismatch for receiving
>>>antennas can be allowed to be much greater than for transmitting. This
>>>statement is directed to the fact that transmission line loss is
>
> increased
>
>>>by VSWR, and the reciever isnt restricted to being the same impedance of

>
> the
>
>>>transmission line.
>>>
>>> Jerry
>
>
>
> Jim
>
> I sure wouldnt argue with your findings. I guess this identifies my
> sloppy engineering. I didnt think 4 Db was a tolerable feed line loss
> under any but the most dire circumstances. I wonder what a ~3:1 VSWR would
> do to add attenuation to feed line loss os, say 1 1/2 db.
> To further identify my sloppyness, I cant distinguish zero db from 0.1 db.
> It is even difficult for me to determine with any confidance the difference
> between Zero db and 1 db.
> What I'm getting at is -- I still contend that a receiver can tolerate
> some mismatches that arent tolerable in a sophisticated transmitting
> station. Richard Fry has pointed out how critical small mismatches are in
> FM transmitters. This original post referanced a FM transmitting antenna.
> It would be reasonable (to me) to assume this referanced antenna could
> have some rigid constraints if it was to be used for transmitting stereo FM.
> But, as a omniazimuth FM receiver antenna, the phasing might be fairly
> straightforward.
>
> Jerry
>
>

1752. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 04:29:40 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <la4rh09q4lplehal7o5nsk08lji36j8o9r@4ax.com>
Source record: 90973

What difference does the motive power have with regard to the control system? A gassie will react the same way as an electric does when they lose the transmitted control signal, whether by failure or by going out of range. An AM or FM radio will react unpredictably when confronted with loss of signal. PCM radios are more immune to interference and can be pre-set for failure. Or, are you saying that the method of powering the model makes a difference in what happens during radio failure? Even if the model is dynamically stable (most are), if the servos apply full pitch up and full rudder, a spin will ensue. I have built and flown almost every kind of model aircraft, rubber, gas and electric using every kind of contol system including none over the last fifty years. A "back-yard" electric from the bargain store will crash without control. The model can be built light enough so that little, if any, damage will be done. Of course, there is always the chance that the controls will fail in such a position that a glide to landing will occur. In that case, go right out and buy a lotto ticket. Some of those "no control" models used a method using a fuse to burn a rubber band that allowed the empennage to pitch up. The model would stall and (hopefully) return to earth in a steep, deep stall. Little or no damage was sustained because of the lightness of the construction.

Russ

On Sat, 14 Aug 2004 03:08:46 GMT, "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote:

>Are you aware that we are talking ELECTRIC models
>Art
>"Russ" <carlzomer@hotmail.com> wrote in message
>news:3tqqh0djf6pqpkilv13vr6a6tmpr76mmu1@4ax.com...
>> Art,
>>
>> Without the radio signal from the transmitter, the receiver will
>> respond to noise and move the control servos to unpredictable
>> positions, pretty much always resulting in a crash. Modern PCM
>> receivers can be programmed to assume pre-set control positions in the
>> absence of the control signal. This will usually result in a crash.
>> I have hundreds of hours flying RC model aircraft.
>>
>> Russ
>>
>> On Fri, 13 Aug 2004 04:38:51 GMT, "aunwin@insightbb.com"
>> <aunwin@insightbb.com@insightbb.com> wrote:
>>

>> >Your knoweledge exceeds mine on this subject
>> >The instructions say it can take of and also land on at from hard
>surfaces.
>> >With two engines being in the contol positions of either on or off it
>would
>> >suggest that without power the plane will "glide" to a landing. this
>gliding
>> >after exceeding transmitter range does present distance measurement
>> >problems. Perhaps if the plane was weighted the landing could be more
>> >"precise" as you say
>> >but short of a "crash"
>> >Seems like toys holds interests of every one .
>> >Art
>> >"Silly Penguin" <SillyPenguin@SparkingWire.com> wrote in message
>> >news:411c304b@post.usenet.com...
>> >> **** Post for FREE via your newsreader at post.usenet.com ****
>> >>
>> >> A Unwin wrote:
>> >> > It will **land** when beyond
>> >> > range of transmitter
>> >>
>> >> Let's be precise - it will crash...
>> >>
>> >>
>> >>
>> >> -=-=-=-

1753. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 04:38:56 UTC
From: Russ <carlzomer@hotmail.com>
Message-ID: <3a5rh0d9r0a81dhu4jg04oa0v5qs2vl1el@4ax.com>
Source record: 90974

On Fri, 13 Aug 2004 22:19:31 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>
>"Russ" <carlzomer@hotmail.com> wrote in message
>news:3tqqh0djf6pqpkilv13vr6a6tmpr76mmu1@4ax.com...
>> Art,
>>
>> Without the radio signal from the transmitter, the receiver will
>> respond to noise and move the control servos to unpredictable
>> positions, pretty much always resulting in a crash. Modern PCM
>> receivers can be programmed to assume pre-set control positions in the
>> absence of the control signal. This will usually result in a crash.
>> I have hundreds of hours flying RC model aircraft.
>
>Off the wall question: What's the "butt-kickinest" high end radio these
>days? PCM's been around for many years, anyone doing error correction, FEC,
>Direct sequence spread spectrum?
>
>
Hi Dave,

I've been away from it for a couple of years, moving, work and
other expensive hobbies. The high-end Airtronics, JRs and Futabas are
still the top of the line. They use PCM but no ECC, FEC or SS. The
transmitters are pretty programmable though. No need for a seperate
heli radio, just program the mixing for a heli control system. The
computer allows for memories for different models, each with custom
mixing and end-point adjustment. No more sliding servo trays for
elevon deltas. Just put a servo on each control surface and mix
appropriately. Dual servo ailerons or flaperons, no problem - just
set 'em up in the TX. You can spend a grand easy on a radio these
days.

Funny, I just got a bunch of stuff out of storage last week
(new house - YAY!) and was looking at a couple of planes longingly.

Russ

1754. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 06:53:45 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <ZFiTc.7499$54.113395@typhoon.sonic.net>
Source record: 90975

Not these stations. They are so-called "clear channel" stations.

DP
==========

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:%pfTc.147043$eM2.107369@attbi_s51...
> Don't they reduce power at night fall to prevent interference with other
> stations
> Art
> "Dave Pitzer" <dpitzer@sonic.net> wrote in message
> news:EfbTc.7425$54.112703@typhoon.sonic.net...
> > I live approx 80 miles from the xmitter of station WABC (New York)
50,000
> > watts. During the day my reception is good-to-very good. After sunset
> > however, the signal is poor to unlistenable -- due to fading and
man-made
> > QRM. The stations night-time signal is directional but I live in the
> > direction of the major lobe. The station advertises covering 27 eastern
US
> > states at night -- which I don't doubt.
> >
> > I can receive a Boston station (WBZ, 50k watts) and a Charlotte, NC
> station
> > (WBT, 50k watts)at night loud and clear. Both of these hundreds of miles
> > from me. (Also get WJR in Detroit and WLS in Chicago loud & clear.)
> >
> > I seem to be in a "shadow" for the relatively close WABC. I'm using a
high
> > quality (Sangean) table radio with a built-in ferrite loop antenn. Any
> > suggestions for improving my WABC night time reception??
> >
> > Dave Pitzer
> > ====================================
> >
> >
>
>

1755. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 06:55:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ianoh05e2n35mg5vqaq2l8ues26hrlmics@4ax.com>
Source record: 90976

On Sat, 14 Aug 2004 03:11:55 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Don't they reduce power at night fall to prevent interference with other
>stations
>Art

Hi Art,

Historically, three letter calls in the AM band were designated as
"clear channel" stations and are generally always lit up at full
power. "Clear channel" was meant to serve a vast region out of major
metropolitan centers. KVI is one here in Seattle, KGO in San
Francisco, WGN & WLS in Chicago, KOA in Denver, KFI & KNX in Los
Angeles, WSM in Nashville, WWL in New Orleans, WBZ in Boston, WHO in
Des Moines, KYW in Philadelphia (strange listing) and so on. Almost
across the board all transmit 24/7 at 50KW with omnidirectional
antennas. Not all three letter calls are clear channel, what with the
change of time and market and financial backing.

73's
Richard Clark, KB7QHC

1756. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 07:00:27 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <fMiTc.7500$54.113532@typhoon.sonic.net>
Source record: 90977

"Bill Turner" <noway@nohow.com> wrote in message
news:4rsqh0teevc64ku2gksp9nh0vq86ucp368@4ax.com...
> On Fri, 13 Aug 2004 22:27:48 GMT, "Dave Pitzer" <dpitzer@sonic.net>
> wrote:
>
> >I live approx 80 miles from the xmitter of station WABC (New York) 50,000
> >watts. During the day my reception is good-to-very good. After sunset
> >however, the signal is poor to unlistenable -- due to fading and man-made
> >QRM. The stations night-time signal is directional but I live in the
> >direction of the major lobe. The station advertises covering 27 eastern
US
> >states at night -- which I don't doubt.
> >
> >I can receive a Boston station (WBZ, 50k watts) and a Charlotte, NC
station
> >(WBT, 50k watts)at night loud and clear. Both of these hundreds of miles
> >from me. (Also get WJR in Detroit and WLS in Chicago loud & clear.)
> >
> >I seem to be in a "shadow" for the relatively close WABC. I'm using a
high
> >quality (Sangean) table radio with a built-in ferrite loop antenn. Any
> >suggestions for improving my WABC night time reception??
> >
> >Dave Pitzer
> >=====================================
> >
>
> --
>
> I have the same situation here in California. I'm about 100 miles from
> KFI, another 50 kW station, and during the day reception is a bit weak,
> but adequate. Come sundown however, reception begins fading and is very
> distorted. The reason is that the groundwave portion of the signal is
> still present, but is now being interfered with by the skywave portion,
> which is not present during the day. If I were to move farther away,
> out of groundwave reception, the signal would become much clearer, but
> only at night. During daytime it would not be heard at all.
>
> It doesn't matter whether I'm using a home or car radio, the effect is
> the same. At night, the clearest stations here are from the San
> Francisco area about 400 miles away, but they are inaudible during the
> day
>
> One help (which I do use at home) is to listen using an SSB receiver.

> The internal BFO in the receiver inserts the sometimes-missing carrier
> and improves things a lot, but still not perfect. There are some
> high-end shortwave radios available which can be set to work this way
> and the improvement is considerable.
>
> Outside of that, using only a radio, not much can be done unless you
> want to try diversity reception using automatically switched antennas.
> At BCB frequencies this takes lots of real estate since the antennas
> have to be separated quite a bit to be effective.
>
> If you want to skip the radio completely (at home) and you have high
> speed internet access, many radio stations have streaming audio
> available. I suppose in time this will be available in cars too.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

This would account for the strange undulating "out of phase" sound -- with the ground and sky waves canceling and reinforcing in a random manner.

Seems to me that there is not much use having 50k watts if the signal in the station's market area is virtually unlistenable. Then again, most of the commercials at night are "national", not "local".

DP
==========

1757. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 07:06:44 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <8SiTc.7501$54.113395@typhoon.sonic.net>
Source record: 90978

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:A7cTc.980$io1.365@nwrddc02.gnilink.net...
>
>
>
> "Dave Pitzer" <dpitzer@sonic.net> wrote in message
> news:EfbTc.7425$54.112703@typhoon.sonic.net...
> > I live approx 80 miles from the xmitter of station WABC (New York)
50,000
> > watts. During the day my reception is good-to-very good. After sunset
> > however, the signal is poor to unlistenable -- due to fading and
man-made
> > QRM. The stations night-time signal is directional but I live in the
> > direction of the major lobe. The station advertises covering 27 eastern
US
> > states at night -- which I don't doubt.
> >
> > I can receive a Boston station (WBZ, 50k watts) and a Charlotte, NC
> station
> > (WBT, 50k watts)at night loud and clear. Both of these hundreds of miles
> > from me. (Also get WJR in Detroit and WLS in Chicago loud & clear.)
> >
> > I seem to be in a "shadow" for the relatively close WABC. I'm using a
high
> > quality (Sangean) table radio with a built-in ferrite loop antenn. Any
> > suggestions for improving my WABC night time reception??
> >
> > Dave Pitzer
> > ====================================
> Dave
>
> I'm curious about a similar situation. in California. Are you able to
> receive the stations equally well, or poorly, with the radio oin a car at
> this location?
>
> Jerry

Hmmmmm.... haven't tried that. The use of a non-directional "whip" (car)
antenna might actually help to seriously attenuate the ground wave yet
"grab" the sky wave.

AM BCB DXing in a car/truck at night is a popular hobby I understand.

DP
==========

DP
==========

1758. AM BCB Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 07:26:41 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <R8jTc.7502$54.113585@typhoon.sonic.net>
Source record: 90979

Would 16 ~ 18 gauge lamp cord (Zip cord) make a good "conductor" for an AM band external long wire? Pull it "apart" and splice for maximum length? or just use one "side"? or "short" it at the far end or at both ends? String it at about roof height? Beyond, say, 100 feet, how important is length?

Thanks in advance.

Dave Pitzer

1759. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 09:37:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10hrnan24s57a49@corp.supernews.com>
Source record: 90980

Roy Lewallen wrote:
> . . .
> Fiddling with the antenna or the antenna/feedline match won't have any
> effect at all on the line SWR. It will, however, have an effect on the
> strength of signal arriving at the receiver.

Oops. I meant, WHEN RECEIVING, fiddling with the antenna or the antenna/feedline match won't have any effect at all on the line SWR. It will, of course, change the line SWR when transmitting.

Roy Lewallen, W7EL

1760. Re: AM BCB Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 11:55:23 UTC
From: j999w@aol.com
Message-ID: <20040814075523.19313.00003601@mb-m04.aol.com>
Source record: 90981

Make it as long as possible. Split the wire and solder it end to end. Depending on your receiver, a simple LC tuner will help cut down on images across the band due to receiver overload (unless you have a R75 or such). Roof height is plenty high enough.

Good luck !

jw
k9rzz

1761. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 12:01:23 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2o6d8jF7a4itU1@uni-berlin.de>
Source record: 90982

"Bill Turner" wrote>
> I have the same situation here in California. I'm about 100 miles from
> KFI, another 50 kW station, and during the day reception is a bit weak,
> but adequate. Come sundown however, reception begins fading and is
> distorted. The reason is that the groundwave portion of the signal is
> still present, but is now being interfered with by the skywave portion,
> which is not present during the day. If I were to move farther away,
> out of groundwave reception, the signal would become much clearer,
> but only at night. During daytime it would not be heard at all.

Various types of "anti-fade" radiators are used by many of the 50kW stations to try to minimize this effect.

There is a tradeoff in the electrical height of the usual AM broadcast transmit antenna between producing the greatest groundwave and generating an excessive high angle skywave that can interfere with that groundwave at night.

A 225 degree vertical is about optimum for groundwave, but has a high angle lobe that can cause this type of interference problem. A 195 degree vertical has less groundwave but little/no high angle lobe, and so is used by many full time 50kW stations. WJR, Detroit is an example of a station using a 195 degree vertical (700 foot guyed tower).

Other antenna types also have been used for this, such as the "Franklin," which is a sectionalized antenna with one vertical radiator above another, each driven separately.

Note also that the carrier frequency of the station, the conductivity along the groundwave path, and skywave propagation conditions will have an affect on the location of this zone, and the extent of interference there.

R. Fry
(WJR staff engineer, mid 1960s)

1762. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 12:07:48 UTC
From: k9sqg@aol.com
Message-ID: <20040814080748.11752.00003186@mb-m11.aol.com>
Source record: 90983

So to those that think a simple Transorb or air gap device will protect their 5 v CMOS circuitry...

1763. William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 13:00:19 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com>
Source record: 90984

The following QST from ARRL makes me sad. I recall working Bill, W9INN, on CW in the early days with my WT7AAN call and was thrilled to say I was using a W9INN 40/80 dipole. His antenna is still in use at my QTH with additional legs added for other bands. Bill was an asset to our hobby and will be missed. I learned a lot about antennas from his detailed instructions provided with each antenna and will always remember the smallest ad in QST from W9INN.

Dick, AA5VU

------ Forwarded Message
From: "ARRL Letter Mailing List" <letter-dlvy@arrl.org>
Date: Fri, 13 Aug 2004 16:20:38 -0400
Subject: The ARRL Letter, Vol 23, No 32

* William Fanckboner, W9INN, SK: William E. "Bill" Fanckboner, W9INN, of Mt Prospect, Illinois--the proprietor of W9INN Antennas--died July 30. He was 80. W9INN Antennas will die with him. "He did all of the work by himself, so it is effectively out of business," said his daughter, Robin Randall. "He was the business." Refunds will be mailed to those with existing orders

other text cut

------ End of Forwarded Message

1764. Re: AM BCB Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 15:10:33 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnchsar9.1t32.bit-bucket@shell.config.com>
Source record: 90985

On Sat, 14 Aug 2004 07:26:41 GMT, Dave Pitzer hath writ:
> Would 16 ~ 18 gauge lamp cord (Zip cord) make a good "conductor" for an AM
> band external long wire? Pull it "apart" and splice for maximum length? or
> just use one "side"? or "short" it at the far end or at both ends? String it
> at about roof height? Beyond, say, 100 feet, how important is length?

You may find that stuff to be too "stretchy". I.e., after you get up
up and taut, several days later you may find an unacceptable sag in it.
You'll pull it tight -- and again, it'll sag.
Eventually you'll have a _much_ longer antenna made out of 22 ga. :-)

At least, I think that'll be the situation with the length(s) you seek.

Lamp (zip) cord is manufactured for 'flexibilty' -- not tensile strength.

HTH
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1765. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 15:16:13 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <e%pTc.17352$pT5.12110@lakeread05>
Source record: 90986

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
news:aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com...
> The following QST from ARRL makes me sad. I recall working Bill, W9INN,
> on CW in the early days with my WT7AAN call and was thrilled to say I
> was using a W9INN 40/80 dipole. His antenna is still in use at my QTH
> with additional legs added for other bands. Bill was an asset to our
> hobby and will be missed. I learned a lot about antennas from his
> detailed instructions provided with each antenna and will always
> remember the smallest ad in QST from W9INN.
>
> Dick, AA5VU
>

Sad to see another member of the mom-and-pop radio community pass,
in this age of everything being made in the Pacific Rim.

Pete

1766. Re: AM BCB Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 15:17:48 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <J0qTc.17367$pT5.10294@lakeread05>
Source record: 90987

Directivity is more important on the AM BCB band. Consider making
a tunable loop (one foot diameter or so..) that will allow you to peak
the direction for desired stations.

Pete

"Dave Pitzer" <dpitzer@sonic.net> wrote in message
news:R8jTc.7502$54.113585@typhoon.sonic.net...
> Would 16 ~ 18 gauge lamp cord (Zip cord) make a good "conductor" for an AM
> band external long wire? Pull it "apart" and splice for maximum length? or
> just use one "side"? or "short" it at the far end or at both ends? String
it
> at about roof height? Beyond, say, 100 feet, how important is length?
>
> Thanks in advance.
>
> Dave Pitzer
>
>

1767. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 15:51:17 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <VxqTc.4511$io1.3274@nwrddc02.gnilink.net>
Source record: 90988

Jim

Thanks for taking the time ti 'open my eyes'. I had thought I knew
enough about receiving weak signals to understand how to make this antenna
and feed line work best. But, I dont know how to design front ends for FM
reception. I've been baffeled recently while working with amplifiers and
pads at the front end of the receiver.
Your post has made me realize that I do need to do some reading.

Thanks
Jerry

"Jim - NN7K" <nn7kexk7zfg@sbcglobal.net> wrote in message
news:mlgTc.6296$aH.1957@newssvr29.news.prodigy.com...
> Jerry-- at your stated 1.5 dB loss coax, with a 3/1 vswr, the extra loss
> would be just under .7dB, but remember that the reflected mismatch, also
> will affect your recievers front end noise (factot/figure), most likely
> in a negative way (no way to calculate the impedence presented to your
> rcvr front end) also, remember that fm sensitivity (because of its
> nature) is not near as sensitive as cw/ssb (typical 2 meter rcvr can
> detect a signal below .01 microvolt cw - fm rcvr does good around .1
> microvolt- 20 dB more sensitive! Something to think about-- jim NN7K
>

1768. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 16:23:42 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <i0rTc.769$og.579@nwrddc04.gnilink.net>
Source record: 90989

Bill
Have you seen the homes they built at the base of KNX's tower? It makes
me wonder about how much tolerance we have to radiation.
Jerry

"Bill Turner" <noway@nohow.com> wrote in message
news:4f7sh0h2ajejdjiqn5cc44t4oibueban3n@4ax.com...
> On Sat, 14 Aug 2004 03:11:55 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> >Don't they reduce power at night fall to prevent interference with other
> >stations
>
> --
>
> KFI runs 50 kW, 24/7. I went on a tour of the site last year and if I
> recall correctly, the only time they reduce power is during tours when
> the tour group is at the base of the antenna, or when maintenance is
> being done on the main antenna and they have to switch to the secondary
> antenna. A fascinating tour, by the way. Take it if you ever have the
> chance.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

1769. phasing harness question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 16:27:30 UTC
From: mike beauchamp <mbeauchamp@cogeco.ca>
Message-ID: <P3rTc.3991$%m4.830215@read2.cgocable.net>
Source record: 90990

what is the formula /s used in making a vhf 4element vertical phased array
phasing harness?
can anyone help?
ve3-tya
mbeauchamp@cogeco.ca

1770. Re: phasing harness question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 16:43:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411e4285$1_8@corp.newsgroups.com>
Source record: 90991

mike beauchamp wrote:
> what is the formula /s used in making a vhf 4element vertical phased array
> phasing harness? can anyone help?

Roy, W7EL, has an article in "The ARRL Antenna Compendium", Vol 2,
titled, "The Simplest Phased Array Feed System ... That Works".
I believe the software is available from his web page at:

http://www.eznec.com
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1771. Re: htx-202

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 17:23:36 UTC
From: CW <"no adddress"@spam>
Message-ID: <d-adnYTzbeYF14PcRVn-qQ@comcast.com>
Source record: 90992

If this htx 202 is typical, an external mic will be much worse.

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41127406.7070200@psu.edu...
> One of the first things you want to do is check to see if it is the
> internal mic, or if it is a gain problem. Buy or borrow an external mic
> that will work with the unit, then try that. Problem cured? It is the
> mic. No? then it is probably a gain or other problem.
>
> Hope this helps.
>
> - Mike KB3EIA -
>
>
> this is a site that oddly enough is a service for blind people, but has
> many manuals for radios:
>
>
>
http://www.icanworkthisthing.com/docs/amateur_radio/handheld/HTX202%20and%20Notes.shtml
>

1772. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 17:24:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d6rph05th3t4tr8p3qgpfcgnj6t1p6oade@4ax.com>
Source record: 90993

On Sat, 14 Aug 2004 01:08:12 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Richard Harrison wrote:
>> Richard Clark, KB7QHC wrote:
>> "(don`t fall for the monster under the bed stories of gazillion volts at
>> a bajillion amps)."
>
>It's not a monster under the bed. But it is a heaven of a blast!

Hi Dave,

The point of the monster is that it is NOT under the bed, but in the
heavens. Let's look at the numbers you provide:

>First peak 100,000 amperes with a second strike of
>50,000 amperes. Full Width Half Maximum [approximately 50% pulsewidth]
>of 100 useconds for each peak.

Expressed as power into a section of tower where the cumulative
resistance is 1 mOhm (not unreasonable) and giving the stroke a full
second sustained current flow (I've never seen such a long one) so we
can round the numbers into watt-seconds (never mind KWH); and figuring
a duty cycle of 0.01% based on your pulse width, but let's get
extravagant and say 0.1%; then both strikes express all of 150
milli-watt-seconds of power.

>500 amperes sustaining current in the lightning channel for 300 milliseconds.

Again, expressed in watt-seconds (sneering KWH) this probably doubles
the power burden another 150 milli-watt-seconds. Total power: less
than half a watt-second or as much heat as 1/10th of a Christmas tree
bulb held for the same time as the strike. For those who remember
NE-2 bulbs in their radio's front end, these are rated at 1/4 Watt.
The paranoid may wish to parallel several, but such devices exhibit
what is called current hogging - one will fire to destruction before
the others light up.

To demonstrate the catastrophe that is so often associated with a
strike, divert the same strokes to a nearby tree that shows all of 10
Ohms resistance in its sap: 3 KW-Seconds. Try holding three clothes
irons for 1 second. :-)

Even this is barely remarkable given the heat is spread over a
considerable bulk. What makes the difference so destructive? That
same time element. The heat does not have the leisure of dissipation
in 100ï¿½S and concentrates. This accounts for the scoring of a strike

on metal, or the steam explosion in a tree trunk.

>4) Electric field intensity prior to prestrike is greater than 10,000
>volts per meter.
>
>Conclusion: Lightning has lots of energy.

Energy is a strange thing, sunlight has vastly more energy than radio waves at HF (or VHF or UHF or SHF or....) No one worries about their radio at the beach, but they put sun screen on their skin. Walking across a wool carpet generates far more energy than a pre strike, but hardly enough power for a pinwheel. Separating two sheets of typing paper is about the same risk.

This does not diminish the liability to sensitive components. The electric fields created by the casual separation of paper can destroy a transistor IFF it is not in a circuit. The power absorbed by common, resistive components in relation to that same transistor protect it simply. There are some circuit designs that seek a high input resistance that easily fail to this assault. I should note that in this day and age of surface mount that there are also resistors that can be destroyed by these casually generated potentials.

>Systems have been designed to
>not only survive a direct strike but to operate through the direct
>strike. All it takes is $$$$$$.

Well, for the amateur (not working through a strike) perhaps $$.

The risk is: "Do you maintain 0.001 Ohm or better strike paths?"

73's
Richard Clark, KB7QHC

1773. Re: AM BCB Long Wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 17:36:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cfliitiql1@hercules.btinternet.com>
Source record: 90994

Thin copper wire does not keep stretching for ever. In general it only stretches once under a given tension.

Copper has the very useful property of work-hardening as it stretches. If the tension is not increased further than its previous maximum tension it remains at the same length.

If any part of a length has a tendency to stretch more than another, perhaps because it is slightly thinner, then that part hardens first until the remainder catches up.

Give the wire a good stretch, to make it dead sraight, before erecting an antenna and it will remain at that length. Electrical properties will not be significantly affected.

I have used the same thin 18 and 20 gauge, enamelled, magnet, antenna wire for many years without any problems of this sort.

Reg, G4FGQ

1774. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 17:55:05 UTC
From: CW <"no adddress"@spam>
Message-ID: <WZGdnapZ8o5kzIPcRVn-pA@comcast.com>
Source record: 90995

What part of "electromagnetic pulse" refers to nuclear blast?

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:lbmnh0tprbjmq353e5k6cr9l6jqrv9eem0@4ax.com...
. You are too much concerned with Nuclear
> Blast. If you suffer EMP, you've got far more to worry about.

1775. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 18:29:56 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <ESsTc.25206$Jp6.24364@newsread3.news.atl.earthlink.net>
Source record: 90996

"CW" <no adddress@spam free.com> wrote in message
news:WZGdnapZ8o5kzIPcRVn-pA@comcast.com...
> What part of "electromagnetic pulse" refers to nuclear blast?
>

For many that is what is thought of. Just as when someone mentions dropping
THE bomb. It is thought of as nuclear.
An air burst is suspose to cause the EMP that will fry most electronics.

1776. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 19:19:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2q3qh0h0oajevtnevcecgeb6ik1vv12d2t@4ax.com>
Source record: 90997

On Sat, 14 Aug 2004 18:29:56 GMT, "Ralph Mowery"
<rmowery28146@earthlink.net> wrote:

>
>"CW" <no adddress@spam free.com> wrote in message
>news:WZGdnapZ8o5kzIPcRVn-pA@comcast.com...
>> What part of "electromagnetic pulse" refers to nuclear blast?
>>
>
>For many that is what is thought of. Just as when someone mentions dropping
>THE bomb. It is thought of as nuclear.
>An air burst is suspose to cause the EMP that will fry most electronics.
>
>
For All,

reference "The Electromagnetic Bomb (E-Bomb)":
http://www.airpower.maxwell.af.mil/airchronicles/kopp/apjemp.html

"The ElectroMagnetic Pulse (EMP) effect [1] was first observed
during the early testing of high altitude airburst nuclear weapons
[GLASSTONE64]. The effect is characterised by the production of a
very short (hundreds of nanoseconds) but intense electromagnetic
pulse, which propagates away from its source with ever diminishing
intensity, governed by the theory of electromagnetism.
...
"Even if the pulse is not powerful enough to produce thermal
damage, the power supply in the equipment will readily supply
enough energy to complete the destructive process. Wounded devices
may still function, but their reliability will be seriously
impaired. Shielding electronics by equipment chassis provides only
limited protection, as any cables running in and out of the
equipment will behave very much like antennae, in effect guiding
the high voltage transients into the equipment."

Note, the EMP of the Flux Compression Generator, an example of a
tactical E-Bomb, is VASTLY richer in current unlike a lightning
strike:
"The FCG is a device capable of producing electrical energies of
tens of MegaJoules in tens to hundreds of microseconds of time, in
a relatively compact package. With peak power levels of the order
of TeraWatts to tens of TeraWatts, FCGs may be used directly, or
as one shot pulse power supplies for microwave tubes. To place
this in perspective, the current produced by a large FCG is
between ten to a thousand times greater than that produced by a

typical lightning stroke [WHITE78]."

However, these intense currents are not widely suitable for mission purposes for the same reasons of the Lightning's current pulse: "Whilst FCGs are potent technology base for the generation of large electrical power pulses, the output of the FCG is by its basic physics constrained to the frequency band below 1 MHz. Many target sets will be difficult to attack even with very high power levels at such frequencies..."

Details abound in this paper, which I will leave to the student to absorb. Of particular note are the statements about coupling efficiency (unpredictable) and range (hundreds of meters).

73's
Richard Clark, KB7QHC

1777. Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 19:19:46 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10hspeh1srk3931@corp.supernews.com>
Source record: 90998

I have taken two lengths of 1.66" OD (1-1/4" nominally labeled) PVC pipe ("top" is 5 feet long, "bottom" is 10 feet long) and connected them with a PVC "T" joint.

On the top I have wound 210" long 12 gauge, solid copper wire to cover about 4.75 feet of the "top" PVC length and done the same on the "bottom".

I feed a length of RG-8 into the bottom of the pipe and out the "T" joint and connect the center conductor to the top winding and the braid to the bottom winding.

The whole smash is then mounted vertically in an old umbrella stand.

So I have a vertical dipole with roughly lambda / 4 (for 20m) length of radiator top and bottom. I was not sure whether to wind the top and bottom the same way so I "matched" them insofar as they look like the continuous threads of a screw. Not sure if that is right.

Seems to work well as a receiving antenna, not sure on the transmitting part as yet.

Comments, especially regarding construction changes and tuning would be welcome.

Thanks.

73s

Thomas

1778. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 20:11:30 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <TluTc.20125$Yf6.6216@lakeread03>
Source record: 90999

"Richard Clark" <kb7qhc@comcast.net> wrote

> <david.shrader@comcast.net> wrote:
>
> >Richard Harrison wrote:
> >> Richard Clark, KB7QHC wrote:
> >> "(don`t fall for the monster under the bed stories of gazillion volts
at
> >> a bajillion amps)."
> >
> >It's not a monster under the bed. But it is a heaven of a blast!
>
> Hi Dave,
>
> The point of the monster is that it is NOT under the bed, but in the
> heavens. Let's look at the numbers you provide:
>
> >First peak 100,000 amperes with a second strike of
> >50,000 amperes. Full Width Half Maximum [approximately 50% pulsewidth]
> >of 100 useconds for each peak.
>
> Expressed as power into a section of tower where the cumulative
> resistance is 1 mOhm (not unreasonable) and giving the stroke a full
> second sustained current flow (I've never seen such a long one) so we
> can round the numbers into watt-seconds (never mind KWH); and figuring
> a duty cycle of 0.01% based on your pulse width, but let's get
> extravagant and say 0.1%; then both strikes express all of 150
> milli-watt-seconds of power.
> >
> >500 amperes sustaining current in the lightning channel for 300
milliseconds.
>
> Again, expressed in watt-seconds (sneering KWH) this probably doubles
> the power burden another 150 milli-watt-seconds. Total power: less
> than half a watt-second or as much heat as 1/10th of a Christmas tree
> bulb held for the same time as the strike. For those who remember
> NE-2 bulbs in their radio's front end, these are rated at 1/4 Watt.
> The paranoid may wish to parallel several, but such devices exhibit
> what is called current hogging - one will fire to destruction before
> the others light up.
>
> To demonstrate the catastrophe that is so often associated with a
> strike, divert the same strokes to a nearby tree that shows all of 10

> Ohms resistance in its sap: 3 KW-Seconds. Try holding three clothes
> irons for 1 second. :-)
>
> Even this is barely remarkable given the heat is spread over a
> considerable bulk. What makes the difference so destructive? That
> same time element. The heat does not have the leisure of dissipation
> in 100 S and concentrates. This accounts for the scoring of a strike
> on metal, or the steam explosion in a tree trunk.
>
> >4) Electric field intensity prior to prestrike is greater than 10,000
> >volts per meter.
> >
> >Conclusion: Lightning has lots of energy.
>
> Energy is a strange thing, sunlight has vastly more energy than radio
> waves at HF (or VHF or UHF or SHF or....) No one worries about their
> radio at the beach, but they put sun screen on their skin. Walking
> across a wool carpet generates far more energy than a pre strike, but
> hardly enough power for a pinwheel. Separating two sheets of typing
> paper is about the same risk.
>
> This does not diminish the liability to sensitive components. The
> electric fields created by the casual separation of paper can destroy
> a transistor IFF it is not in a circuit. The power absorbed by
> common, resistive components in relation to that same transistor
> protect it simply. There are some circuit designs that seek a high
> input resistance that easily fail to this assault. I should note that
> in this day and age of surface mount that there are also resistors
> that can be destroyed by these casually generated potentials.
>
> >Systems have been designed to
> >not only survive a direct strike but to operate through the direct
> >strike. All it takes is $$$$$$.
>
> Well, for the amateur (not working through a strike) perhaps $$.
>
> The risk is: "Do you maintain 0.001 Ohm or better strike paths?"
>
> 73's
> Richard Clark, KB7QHC

Hi Richard - can you please explain this "duty cycle of 0.1%" ? I thought it was expressed as a 10% duty cycle - but then a 50kva strike would be expressed as 5kva sustaining current in the lightning channel, not 500 amperes. Dave - was that 500 amperes a typo or the figure used by the USAF for protection design? My internal surge protection is designed for 10kva max, and the rooftop downconductors would certainly be expected to carry at least 5x that much for a short time from a direct attachment. Even internal AC wiring is designed to carry 6kv/1kva before dialectric breakdown. Which does incidentally happen from those 100kva strikes. It just happened less

than half a mile up the beach from me last month.

Thanks,

Jack Painter
Virginia Beach VA

1779. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 20:44:07 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <rQuTc.783$og.110@nwrddc04.gnilink.net>
Source record: 91000

"Thomas" <nospam@nospam.com> wrote in message
news:10hspeh1srk3931@corp.supernews.com...
> I have taken two lengths of 1.66" OD (1-1/4" nominally labeled) PVC pipe
> ("top" is 5 feet long, "bottom" is 10 feet long) and connected them with
> a PVC "T" joint.
>
> On the top I have wound 210" long 12 gauge, solid copper wire to cover
> about 4.75 feet of the "top" PVC length and done the same on the "bottom".
>
> I feed a length of RG-8 into the bottom of the pipe and out the "T"
> joint and connect the center conductor to the top winding and the braid
> to the bottom winding.
>
> The whole smash is then mounted vertically in an old umbrella stand.
>
> So I have a vertical dipole with roughly lambda / 4 (for 20m) length of
> radiator top and bottom. I was not sure whether to wind the top and
> bottom the same way so I "matched" them insofar as they look like the
> continuous threads of a screw. Not sure if that is right.
>
> Seems to work well as a receiving antenna, not sure on the transmitting
> part as yet.
>
> Comments, especially regarding construction changes and tuning would be
> welcome.
>
> Thanks.
>
> 73s
>
> Thomas

I see 2 problems here Thomas. You are confusing the length of the wire you wound into inductors as having the same electrical length as a straight piece- nothing could be further from correct. In fact, the relationship between the amount of wire in the coils and their equivalent electrical length is complex and depends on a number of factors including where along the radiator the inductors are placed.
Secondly, running the coax up inside the PVC will likely result in a large amount of RF being impressed on the exterior of the coaxial shield.
Visit Reg Edward's site to see how to electrically shorten a radiator with inductive loading.

Dale W4OP

1780. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 21:32:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <inaqh05u1n5n4tqkfnteffarbld91qskmg@4ax.com>
Source record: 91001

On Sat, 14 Aug 2004 16:11:30 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>Hi Richard - can you please explain this "duty cycle of 0.1%" ?

Hi Jack,

Duty cycle is a simple ratio of on time to off time. It would be
presumptuous to offer that the strike off time for any particular spot
on earth is hundreds of years, so the choice of one second is suitably
long enough given strike components have long since faded, but are
easily recent both.

The shape of the pulse complicates the estimate because Duty Cycle is
often expressed in the expectation of a square wave. What is the on
time? When you get into pulse work, most in the field arbitrarily
assign the width of the half-power, or half-voltage points. For
Dave's numbers, this would be some 100ï¿½S which, when compared to 1
second is actually 0.01%. Being generous, and given the shape of the
decay I simply threw in a 10X fudge factor.

> I thought it was expressed as a 10% duty cycle

10% of what? Lightning current flows for 100ï¿½S and is off for 1mS?
Dave clearly expresses lingering current flow out to 300mS so that is
clearly wrong.

> - but then a 50kva strike would be
>expressed as 5kva sustaining current in the lightning channel, not 500
>amperes.

Where did the volts come from? If the pre strike fields are running
10KV then your strike has only 5A in it. This is the pencil whipping
that comes with lightning: the voltage description. ALL of that
voltage is dropped across 10000 feet of discharge length, not in the
last 3 inches from the tip of the bolt to ground.

In normal, settled air, in the most benign weather without any
disturbance, the potential gradient from earth to sky is 180V/M. That
is to say, your head is at an elevated potential of 300V with respect
to your feet. At an altitude of 10000 feet the potential is
1,800,000V without any inducement to discharge.

>Dave - was that 500 amperes a typo or the figure used by the USAF
>for protection design? My internal surge protection is designed for 10kva
>max, and the rooftop downconductors would certainly be expected to carry at
>least 5x that much for a short time from a direct attachment. Even internal

>AC wiring is designed to carry 6kv/1kva before dialectric breakdown. Which
>does incidentally happen from those 100kva strikes. It just happened less
>than half a mile up the beach from me last month.

You need to look at those surge protection ratings again. My
experience is that they are rated in Joules capacity which is NOT the
same thing as v-amperes. The two may be equivalent, but your
reference for volts is missing altogether. As I offered in other
postings: where did the voltage come from? If your tower is of the
standard design, you are not going to develop any appreciable voltage
unless you introduce resistance or impedance to develop it from the
current flow. 100,000A through 0.001 Ohms may give you 100V at best,
and only if you can reach the top of tower where the strike hits.

For those who want to multiply this voltage with Z, calculate the
impedance of a 12" diameter wire 50' tall at a frequency of 1MHz.
Perhaps this will make an NE-2 glow, if its leads are long enough.

> It just happened less
>than half a mile up the beach from me last month.

No doubt, but what exactly was "It" that happened? Stick 50 feet of
tower up into the air, and interrupt it with insulation and YES! arcs
will spark. No one needs an insulated $$$$$$ tower - thousands of
commercial installations typically discard that feature in favor of
simple $$ lightning protection.

73's
Richard Clark, KB7QHC

1781. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 22:18:31 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408141418.706df777@posting.google.com>
Source record: 91002

Richard,

Thank you for the exhaustive reply!

> [...] this works for RF but for lightning that
> is another matter (and at different frequencies simultaneously).

LOL!

> Your need for ground when you are using a dipole is unwarranted in
> terms of RF.

Yes and no. A "stand alone" antenna such as a dipole is not worked against a RF ground. (BTW, I remember seeing Hertz's original dipole in a museum in Wuerzburg... & I swear it wasn't grounded). But a ground is a good pulse sink if it is very permeable across the spectrum. In that sense, a pulse sink should be a decent RF ground too.

> Make sure the ends stand off
> from the supports by a good amount - I can only guess, and that would
> be 10 feet.

Absolutely!

> Insofar as safety ground goes, it is hard to believe that
> is not supplied in your apartment - somewhere. Further, with regard
> to lightning, you are probably already living inside a faraday shield
> (the building's steel, skeletal structure), but make sure you ground
> the coax coming into the apartment at the window or where it
> penetrates a wall. To answer my earlier question, connect the coax
> shield to the building frame before it begins its descent to your
> apartment.

I wish...

In this part of the world steel structures are unheard of 'cept in industrial buildings. The tallest building in the country is only 30 floors, and its structure is reinforced concrete. Also, walls are always some form of brick & mortar ot at least gypsum. This explain why fire safety & property insurance are almost an afterthought here. We do have disasters, but very few in post 1930's high rises - mostly it's cheap built 19th century buildings collapsing after a gas explosion. Otherwise, one flat may burn out but others won't be damaged.

Also, a power grounding is very effective for low frequency events. If you get zapped by a pulse, all bets are off if your ground is high

impedance - and an end-fed thin ground wire is. In my case, the
shortest route to the building ground connection on my floor is almost
100 ft with lots of zigzagging.

> Think of a Gamma or Delta match. Although these connect to the metal
> of the structure they drive, they are inductive loops. You could as
> easily build the loop and place it in close proximity to the structure
> to accomplish the same thing. This gives you isolation except for the
> frequency the loop is tuned to (and would limit you to a narrow band
> of operation unless you have some means to remotely tune it).

I had never thought of that. So a broadband / omni antenna puts a bit
more punch into the coax than a narrowband / mispointed beam. But I'd
still rather put up a simple, forgiving, uncritical broadband, even if
known inferior.

> Keeping leads apart and away from conductive structures replaces all
> the exotic insulation you could imagine. Besides, if we are talking
> about your T2FD and coax, I cannot imagine this is a problem in the
> first place. You are going to want to drive the coax shield to ground
> as soon as possible, not isolate it with insulation. You are going to
> want to isolate the T2FD ends, but any induced potentials will have to
> reckon with the built in resistor snubbing them. Such potential does
> not merit heroic insulation efforts.

OK, I'm abandoning the heroic insulation efforts. I'll ground the
coax up on top, and introduce an insulating transformer to decouple
grounds only if double grounding introduces noise - that can be done
later at the shack end of the coax.

> >What is the spectrum of an EMP?
> It is mostly Pulsed DC with very little RF over 1MHz. The pulse shape
> is characteristically described as several ï¿½S rise and about 20 ï¿½S
> fall. If you consider the strike contains 100,000A and integrate this
> pulse over one second, then the duty cycle reduces this to 10 - 100 A.

Now I know what to expect when I wile away a thunderstorm sucking an
antenna plug.

> >I NEVER saw baluns with windings atop each other>
> To maintain a wide bandwidth and to preserve balance.

Got it!

> I have repaired many such sets, professional and consumer alike. Yes,
> some included the NE-2. That practice was discarded just as many
> years ago too. There are probably a billion TVs out there, and not
> one of them with this kind of protection.

Things change. Just as many more people now enjoy the other side, most
TVs get their storm thrills through the power socket nowadays -
especially if served by cable :0. Open a PSU, and you'll likely find
MOV's. Not good for RF work because they tend to have too much

capacitance....

And TV antennas tent to be 1) tiny 2) narrow beam, 3) tuned to UHF. No protection againt a direct hit, but non that sensitive to near hits.

The market for gas discharge devices for many kinds of RF applications is still quite lively though, and it's not for protection against nearby transmitters.

> mine the archives of rec.radio.amateur.antenna
> for Richard Harrison, KB5WZI

I'm grabbing my steel hat as I type!

73, thanks again.

Filippo N1JPR/I2

1782. "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 23:02:01 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040814190201.10759.00001227@mb-m13.aol.com>
Source record: 91003

Howdy NGers,

I was curious about another "miracle" short vertical, being subject of great interest, patent by Robert Vincent and Physics dept. of University of Rhode Island. I got up at 4 am, drove to Boxboro ARRL convention and eager to see what are we missing.

Not much!

Giveaway was opening statement something like: how to make shortened antenna with more gain (compare to what? I guess light bulb :-)

In the "theoretical" portion of the presentation audience was told that current across the helical coil decreases away from the feed point, while across loading coil it stays constant. Due overcrowding of "inventor" I did not persist in breaking through and asking for enlightenment.

Author claims more gain (familiar), better bandwidth (doesn't get it why) and small size (of course). Showing measured graphs with current and phase distribution along the radiator. Works very well! (Many stations worked.)

He showed how to measure current at the antenna using ferrite pickup transformer way up the antenna and cables to the instrument (handsomely detuning and distorting the measurements).

I suspect that "broad bandwidth", (SWR 2:1) was achieved thanks to losses in the coils and dielectric, as "confirmed" by his statement that coils were fried when power was applied.

What is it? Basically helically wound coil starting from the base, about half way up the radiator, then piece of straight tubing, than loading coil, then tubing and in some case top hat (works better :-). Matching to 50 ohms is done by picking tap at the base, few coil turns up. That is 3D version.

He showed some "2D" versions, having "coils" made of basically coil formed as hairpin loops instead of classic solenoid, also the loading coil. So kind of 2D - 3D antenna :-)

I wanted to make a bet that my single loading coil loaded vertical would cream the "miracle", but there were so many worshippers paying compliments to the inventor, that I resigned not to stay for the second hour of lecture how to build it.

I saw no trace of any modeling, just experiments using wrong tools.

So brace yourselves for another "miracle" in the arsenal of very small and more efficient antennas. It should be a hit with CBers and other suckered users.

So that's it (oh, no chokes in the feedlines), I hope U of RI is proud of this breakthrough, I can sleep well now. Back to DR1.

Yuri, K3BU
with more info that could have saved lotsa experimenting at
http://www.k3bu.us/loadingcoils.htm

1783. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-14 23:20:49 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ht7ijic90j310@corp.supernews.com>
Source record: 91004

Richard Clark wrote:
> . . .
> You need to look at those surge protection ratings again. My
> experience is that they are rated in Joules capacity which is NOT the
> same thing as v-amperes. The two may be equivalent, but your
> reference for volts is missing altogether. . .

A joule is a watt-second.

Roy Lewallen, W7EL

1784. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 00:03:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jhlqh0h80ilq0p4ff3vsl5tsl22ecfj21m@4ax.com>
Source record: 91005

On Sat, 14 Aug 2004 16:20:49 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Richard Clark wrote:
>> . . .
>> You need to look at those surge protection ratings again. My
>> experience is that they are rated in Joules capacity which is NOT the
>> same thing as v-amperes. The two may be equivalent, but your
>> reference for volts is missing altogether. . .
>
>A joule is a watt-second.
>
>Roy Lewallen, W7EL

Hi Roy,

Quite so. Still missing the volt reference (and no mention of Ohms).

73's
Richard Clark, KB7QHC

1785. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 00:13:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1tlqh0t009pfeqegu6p692rpqkaero6ho7@4ax.com>
Source record: 91006

On 14 Aug 2004 15:18:31 -0700, n1jpr@hotmail.com (SpamHog) wrote:

>TVs get their storm thrills through the power socket nowadays -
>especially if served by cable :0

I once fixed a TV that suffered a direct hit. The tuner in the corner of the cabinet was enveloped in a charred, molten mass of plastic but still worked fine.

This was back in the tube days however, and they were far more robust against EMP.

73's
Richard Clark, KB7QHC

1786. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 00:44:02 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10htcculfdp4kac@corp.supernews.com>
Source record: 91007

The sectionalized vertical antennas mentioned by Richard Fry appear to have been, perhaps still are, frequently used in VK land where distances are great. Makes for a serious antenna.
73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Richard Fry" <rfry@adams.net> wrote in message news:2o6d8jF7a4itU1@uni-berlin.de...>

<snip>
> Various types of "anti-fade" radiators are used by many of the 50kW stations
> to try to minimize this effect.
>
> There is a tradeoff in the electrical height of the usual AM broadcast
> transmit antenna between producing the greatest groundwave and generating an
> excessive high angle skywave that can interfere with that groundwave at
> night.
>
> A 225 degree vertical is about optimum for groundwave, but has a high angle
> lobe that can cause this type of interference problem. A 195 degree
> vertical has less groundwave but little/no high angle lobe, and so is used
> by many full time 50kW stations. WJR, Detroit is an example of a station
> using a 195 degree vertical (700 foot guyed tower).
>
> Other antenna types also have been used for this, such as the "Franklin,"
> which is a sectionalized antenna with one vertical radiator above another,
> each driven separately.
>
> Note also that the carrier frequency of the station, the conductivity along
> the groundwave path, and skywave propagation conditions will have an affect
> on the location of this zone, and the extent of interference there.
>

> R. Fry
> (WJR staff engineer, mid 1960s)
>
>

1787. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 00:45:33 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <4gcth01mrnet9brsh31o8gb416llsj3hk6@4ax.com>
Source record: 91008

On 14 Aug 2004 23:02:01 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:

>Howdy NGers,
>
>I was curious about another "miracle" short vertical, being subject of great
>interest, patent by Robert Vincent and Physics dept. of University of Rhode
>Island. I got up at 4 am, drove to Boxboro ARRL convention and eager to see
>what are we missing.
>
>Not much!
>
>Giveaway was opening statement something like: how to make shortened antenna
>with more gain (compare to what? I guess light bulb :-)
>
>In the "theoretical" portion of the presentation audience was told that current
>across the helical coil decreases away from the feed point, while across
>loading coil it stays constant. Due overcrowding of "inventor" I did not
>persist in breaking through and asking for enlightenment.
>
>Author claims more gain (familiar), better bandwidth (doesn't get it why) and
>small size (of course). Showing measured graphs with current and phase
>distribution along the radiator. Works very well! (Many stations worked.)
>
>He showed how to measure current at the antenna using ferrite pickup
>transformer way up the antenna and cables to the instrument (handsomely
>detuning and distorting the measurements).
>
>I suspect that "broad bandwidth", (SWR 2:1) was achieved thanks to losses in
>the coils and dielectric, as "confirmed" by his statement that coils were fried
>when power was applied.
>
>What is it? Basically helically wound coil starting from the base, about half
>way up the radiator, then piece of straight tubing, than loading coil, then
>tubing and in some case top hat (works better :-). Matching to 50 ohms is done
>by picking tap at the base, few coil turns up. That is 3D version.
>
>He showed some "2D" versions, having "coils" made of basically coil formed as
>hairpin loops instead of classic solenoid, also the loading coil. So kind of 2D
>- 3D antenna :-)
>
>I wanted to make a bet that my single loading coil loaded vertical would cream
>the "miracle", but there were so many worshippers paying compliments to the
>inventor, that I resigned not to stay for the second hour of lecture how to

>build it.
>
>I saw no trace of any modeling, just experiments using wrong tools.
>
>So brace yourselves for another "miracle" in the arsenal of very small and more
>efficient antennas. It should be a hit with CBers and other suckered users.
>
>So that's it (oh, no chokes in the feedlines), I hope U of RI is proud of this
>breakthrough, I can sleep well now. Back to DR1.
>
>Yuri, K3BU
>with more info that could have saved lotsa experimenting at
>http://www.k3bu.us/loadingcoils.htm

Does it also plug into the house wiring for improved TV reception?
Gotta love junk-science!
Howard

1788. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 01:06:08 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <4GyTc.7635$54.115551@typhoon.sonic.net>
Source record: 91009

"Richard Fry" <rfry@adams.net> wrote in message
news:2o6d8jF7a4itU1@uni-berlin.de...
> "Bill Turner" wrote>
> > I have the same situation here in California. I'm about 100 miles from
> > KFI, another 50 kW station, and during the day reception is a bit weak,
> > but adequate. Come sundown however, reception begins fading and is
> > distorted. The reason is that the groundwave portion of the signal is
> > still present, but is now being interfered with by the skywave portion,
> > which is not present during the day. If I were to move farther away,
> > out of groundwave reception, the signal would become much clearer,
> > but only at night. During daytime it would not be heard at all.
> ----------
>
> Various types of "anti-fade" radiators are used by many of the 50kW
stations
> to try to minimize this effect.
>
> There is a tradeoff in the electrical height of the usual AM broadcast
> transmit antenna between producing the greatest groundwave and generating
an
> excessive high angle skywave that can interfere with that groundwave at
> night.
>
> A 225 degree vertical is about optimum for groundwave, but has a high
angle
> lobe that can cause this type of interference problem. A 195 degree
> vertical has less groundwave but little/no high angle lobe, and so is used
> by many full time 50kW stations. WJR, Detroit is an example of a station
> using a 195 degree vertical (700 foot guyed tower).
>
> Other antenna types also have been used for this, such as the "Franklin,"
> which is a sectionalized antenna with one vertical radiator above another,
> each driven separately.
>
> Note also that the carrier frequency of the station, the conductivity
along
> the groundwave path, and skywave propagation conditions will have an
affect
> on the location of this zone, and the extent of interference there.
>
> R. Fry
> (WJR staff engineer, mid 1960s)
>
>

Richard,

Thanks for the response and the "inside", technical information about Broadcast-band-AM stations. I'm happy to say that here in eastern Pennsylvania, WJR has a beautiful night-time signal. About the only thing that disturbs it is "local" weather-based QRM --- i.e. Mother Nature!!!. I even recall listening to WJR in my college days in Charleston, SC in the early 1960's (along with WLS in Chicage and WOR in NYC).

Without knowing, I would guess that WABC (770 KHz) has a rather high angle skywave since its ground- and skywave seem in a constant "tug-of-war" at night --- at least ~80 miles to the northwest of the xmitter.

Thanks,

Dave Pitzer
==========

1789. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 01:15:25 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <wOyTc.156$pl.12@bignews3.bellsouth.net>
Source record: 91010

I think the main problem you'll have is feeding the coax through PVC -
you'll likely get lots of rf onto the braid.
think about feeding through some metal pipe - to protect the coax from
induced rf

"Thomas" <nospam@nospam.com> wrote in message
news:10hspeh1srk3931@corp.supernews.com...
> I have taken two lengths of 1.66" OD (1-1/4" nominally labeled) PVC pipe
> ("top" is 5 feet long, "bottom" is 10 feet long) and connected them with
> a PVC "T" joint.
>
> On the top I have wound 210" long 12 gauge, solid copper wire to cover
> about 4.75 feet of the "top" PVC length and done the same on the "bottom".
>
> I feed a length of RG-8 into the bottom of the pipe and out the "T"
> joint and connect the center conductor to the top winding and the braid
> to the bottom winding.
>
> The whole smash is then mounted vertically in an old umbrella stand.
>
> So I have a vertical dipole with roughly lambda / 4 (for 20m) length of
> radiator top and bottom. I was not sure whether to wind the top and
> bottom the same way so I "matched" them insofar as they look like the
> continuous threads of a screw. Not sure if that is right.
>
> Seems to work well as a receiving antenna, not sure on the transmitting
> part as yet.
>
> Comments, especially regarding construction changes and tuning would be
> welcome.
>
> Thanks.
>
> 73s
>
> Thomas

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1790. Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 01:16:23 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <HPyTc.7639$54.115678@typhoon.sonic.net>
Source record: 91011

Does anyone know of a "good" listing/directory of either U.S. or North American AM broacst band stations ---- with cross listings by call-sign, frequency, location and possibly radiated power?

In other words, a broadcast band DXer's "bible". There surely must be one --- or is BCB DXing not the hobby it once was?

Thanks,

Dave Pitzer
==========

1791. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 01:43:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <umfth09ufu2pgovv6cott5qjk12btd695t@4ax.com>
Source record: 91012

On Sun, 15 Aug 2004 01:16:23 GMT, "Dave Pitzer" <dpitzer@sonic.net>
wrote:

>Does anyone know of a "good" listing/directory of either U.S. or North
>American AM broacst band stations ---- with cross listings by call-sign,
>frequency, location and possibly radiated power?
>
>In other words, a broadcast band DXer's "bible". There surely must be
>one --- or is BCB DXing not the hobby it once was?
>
>Thanks,
>
>Dave Pitzer
>=================

Hi David,

Right next to me, The World Radio & Television Handbook (WRTH).

Not only AM, but SW, FM, and TV for every country in the world.

73's
Richard Clark, KB7QHC

1792. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 01:47:13 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040814214713.29244.00001061@mb-m19.aol.com>
Source record: 91013

>m
>
>Does it also plug into the house wiring for improved TV reception?
>Gotta love junk-science!
>Howard

Not sure, but it is apparently very easy to scale up or down by simply reducing/enlarging it on the copier by factor x. No kidding! Apparently works well into the UHF bands :-) Who needs EZnec.

Can you picture all them wizards joining forces for FracEHDLMCFA gizmo?

Yuri

1793. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:00:09 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <JszTc.20444$Yf6.16989@lakeread03>
Source record: 91014

"Richard Clark" <kb7qhc@comcast.net> wrote

> On Sat, 14 Aug 2004 16:11:30 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
> The shape of the pulse complicates the estimate because Duty Cycle is
> often expressed in the expectation of a square wave. What is the on
> time? When you get into pulse work, most in the field arbitrarily
> assign the width of the half-power, or half-voltage points. For
> Dave's numbers, this would be some 100ΩS which, when compared to 1
> second is actually 0.01%. Being generous, and given the shape of the
> decay I simply threw in a 10X fudge factor.

Thanks Richard.

> > - but then a 50kva strike would be

Meant to say "ka" sorry.

> >Dave - was that 500 amperes a typo or the figure used by the USAF
> >for protection design? My internal surge protection is designed for
10kva
> >max, and the rooftop downconductors would certainly be expected to carry
at
> >least 5x that much for a short time from a direct attachment. Even
internal
> >AC wiring is designed to carry 6kv/1kva before dialectric breakdown.
Which
> >does incidentally happen from those 100kva strikes. It just happened less
> >than half a mile up the beach from me last month.
>
> You need to look at those surge protection ratings again. My
> experience is that they are rated in Joules capacity which is NOT the
> same thing as v-amperes. The two may be equivalent, but your
> reference for volts is missing altogether.

Only the those destructive MOV power strips get rated in joules ;-)

My normal-mode silicon diode surge suppression is rated in KA (not kva,
sorry again).

http://www.transtector.com/documents/salessheets/1451-001.pdf

the 10ka model has a 12,000 amp surge rating. I located one at the main AC
entrance panel (load side) and one on the station's 240v branch panel.
Transtector also produces "power strip" surge protection that is all silicon
with NO MOV's and NO L-G references. My station has no AC surge protection
references to ground, and all equipment is connected to L-N surge protection

power strips. Except the computer which runs through an Amer.Pwr.Con. UPS - which although it has an unavoidable L-G MOV, it is first protected by the two Transtector Fortresses.

> > It just happened less
> >than half a mile up the beach from me last month.
>
> No doubt, but what exactly was "It" that happened? Stick 50 feet of
> tower up into the air, and interrupt it with insulation and YES! arcs
> will spark. No one needs an insulated $$$$$$ tower - thousands of
> commercial installations typically discard that feature in favor of
> simple $$ lightning protection.
>
> 73's
> Richard Clark, KB7QHC

A strike on a home and/or power lines in which the surge was so powerful that it blew the electric meter clean off the wall of the home (burning the powerline and the service panel inside the home). I visited when it was still smoking but they discouraged my camera. I did get a good picture of my neighbor's pine tree striped from 75' in the air to 6' above the ground, where it jumped to and split a wood fence. That was about 50' from the end of my 60 meter dipole which was operating at the time. I'm thinking the surge protection is working as advertised this summer. At this rate I'll soon have more examples that just nearby strikes......but hopefully not.

73,

Jack Painter
Virginia Beach VA

1794. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:12:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cfmgr4jad1@sparta.btinternet.com>
Source record: 91015

"Dale Parfitt" wrote
> Visit Reg Edward's site to see how to electrically shorten a radiator with
> inductive loading.

==========

Hi Dale, yo took the words right out of mar mouf.

Program HELICAL deals with a vertical, continuously-loaded, plastic-pipe antenna, above a ground or above the roof of a vehicle. Because of the uncertain surroundings the program will put you in the right ball park with the number of turns on a pipe of given length and diameter. Putting two antennas back-to-back allows the design of short dipoles without any ground loss.

Program MIDLOAD deals directly with short, centre-fed, continuously-loaded 1/2-wave dipoles with a variety of feeding arrangements. May be either vertical or horizontal dipoles versus height above ground.

These antenna programs are most suitable for the 160, 80 meter and perhaps 40m bands where space is at a premium. At the higher frequencies lump-loading coils can be (or must be) used.

The advantage of continuous helical windings is that THICK, spaced, wire (copper pipe even) can be used. Thick wire means low loss resistance and higher radiating efficiency. Otherwise there's no point in using long helical windings.

There are a variety of my programs which use lumped loading coils some of which incorporate coil design and feedpoint impedance-matching arrangements. In the website refer to the one-line descriptions following each clickable program name.

Incidentally, changing the subject, the reason for using single-turn coils for magloops is that it allows a VERY thick conductor, a 1" or 2" copper pipe, to be used. Otherwise there's no point in using a magloop for transmitting purposes. The magloop is by far most efficient of all the small (in terms of wavelength) antennas. The disadvantage is its expensive or heavily-engineered tuning capacitor. Use program MAGLOOP4 for an accurate performance analysis.

For all readers, download the small, single-file, easy to use, programs in a few seconds from the following website and run immediately. Get your money back if dissatisfied!

.....
Regards from Reg, G4FGQ

For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

1795. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:16:51 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10hthqvdbkruf8c@corp.supernews.com>
Source record: 91016

... and, though it may not have importance at HF, any loss in the transmission line (unless it is very cold) will add noise at the same time that the signal is attenuated.
Once upon a time, serious consideration was given to using liquid air (might have been Nitrogen) to cool a rather short piece of waveguide (between feed and first receiver stage) in a really high frequency system that was pointing out into space. Such cooling would not have changed the attenuation a noticeable amount, but it would have improved the SNR.
... and further: please do not think of using the maximum-power-transfer theorem to maximize SNR. The first stage needs to see a (small) mismatch, which might not be seen by the transmission line.

With a low directivity antenna in the absence of close man-made noise sources, the above issues are usually of no importance at HF and below because the SNR is almost always (in a reasonably well designed system) determined beyond the antenna. [Obviously, a highly directive antenna system could dramatically affect SNR]

73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

1796. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:26:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cfmhk7$3b3$1@titan.btinternet.com>
Source record: 91017

"Roy Lewallen" wrote -

> A joule is a watt-second.

==========

The only trouble with Richard (Clark) is his abuse of the English language.

;o) ;o) ;o)

Punchinello, G4FGQ

1797. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:32:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1lith0pmqbga650qkpc5rhepcqgbk884j1@4ax.com>
Source record: 91018

On Sun, 15 Aug 2004 02:26:15 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>The only trouble with Richard (Clark) is his abuse of the English language.

Glad to observe you don't challenge my technical language.

Figured out mud yet? :-P

73's
Richard Clark, KB7QHC

1798. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:34:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411ecd01_8@corp.newsgroups.com>
Source record: 91019

Yuri Blanarovich wrote:
> In the "theoretical" portion of the presentation audience was told that current
> across the helical coil decreases away from the feed point, while across
> loading coil it stays constant.

I've often wondered at exactly what crossover point a helical coil
turns into a loading coil. If one adds a one inch stinger to a helical
coil, does that turn it into a loading coil? How about a one foot stinger?
Is a one foot long loading coil not a helical coil? Does a one foot long
loading coil really have less phase shift than a one foot long piece of
wire? On a center-loaded mobile antenna, how can the ARCCOS of the current
at the feedpoint be zero degrees and the ARCCOS of the current at the tip
be 90 degrees without there being 90 degrees between the feedpoint and the
tip? (When are you going to invite everyone over to Bar-B-Q that sacred cow?)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1799. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:37:39 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411ecdc1_8@corp.newsgroups.com>
Source record: 91020

Hal Rosser wrote:
> I think the main problem you'll have is feeding the coax through PVC -
> you'll likely get lots of rf onto the braid.
> think about feeding through some metal pipe - to protect the coax from
> induced rf

As I understand it, he is feeding the coax through the center of
the bottom helical coil. What's going to protect the coil from
the metal pipe? :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1800. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:47:53 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411ed02a_8@corp.newsgroups.com>
Source record: 90921

Reg Edwards wrote:

> "Dale Parfitt" wrote
>>Visit Reg Edward's site to see how to electrically shorten a radiator with
>>inductive loading.
>
> Hi Dale, yo took the words right out of mar mouf.

There's a similar thread over on eHam.net.
"RE: Linear loaded mobile antennas"
"Reply by K0BG on August 11, 2004"
"Loading coils DO NOT lengthen an antenna."
Quoted from:
http://www.w8ji.com/mobile_and_loaded_antenna.htm
--
73, Cecil http://www.qsl.net/w5dxp

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1801. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 02:54:47 UTC
From: Bob Miller <bxmillerNoSpam@texas.net>
Message-ID: <rjjth0t5hmt7sk4hl3bbsufume1dupt5d2@4ax.com>
Source record: 90922

On Sun, 15 Aug 2004 01:16:23 GMT, "Dave Pitzer" <dpitzer@sonic.net>
wrote:

>Does anyone know of a "good" listing/directory of either U.S. or North
>American AM broacst band stations ---- with cross listings by call-sign,
>frequency, location and possibly radiated power?
>
>In other words, a broadcast band DXer's "bible". There surely must be
>one --- or is BCB DXing not the hobby it once was?
>
>Thanks,
>
>Dave Pitzer
>=================
>
>
>

A good online source is:

http://www.fcc.gov/mb/audio/amq.html

where you can look up listings for cities, states, frequencies, or by
call sign, or by radius around a certain locale, or by map coordinates
if you know them -- with all pertinent info on each station.

bob
k5qwg

1802. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 03:01:51 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cfmjmv$qv3$1@hercules.btinternet.com>
Source record: 90923

Yuri, your criticism is perfectly sound.

To sum up, the key to antenna radiating efficiency is SIMPLICITY.

The more simple the construction of an antenna the more efficient it will be.

It is intuitivly obvious. Every complication is sure to introduce loss.

Reg

1803. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 03:06:27 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <411ed5a6_3@news1.prserv.net>
Source record: 90924

Unless they have added a lot in the last 3 or 4 years, WRTH's domestic MW listings are pathetic*. White's Radio Log is long gone, unfortunately, so Dave's best bet is to contact the "National Radio Club" which specializes in BCB DX (until BPL and digital take care of that). Run NRC through Google, Dave, they have a large web presence.

*example starting at the low end: WRTH lists 2 stations on 550 kHz. A very old (1975) pattern book from NRC lists 22 US stations.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:umfth09ufu2pgovv6cott5qjk12btd695t@4ax.com...
> On Sun, 15 Aug 2004 01:16:23 GMT, "Dave Pitzer" <dpitzer@sonic.net>
> wrote:
>
> >Does anyone know of a "good" listing/directory of either U.S. or North
> >American AM broacst band stations ---- with cross listings by call-sign,
> >frequency, location and possibly radiated power?
> >
> >In other words, a broadcast band DXer's "bible". There surely must be
> >one --- or is BCB DXing not the hobby it once was?
> >
> >Thanks,
> >
> >Dave Pitzer
> >=================
>
> Hi David,
>
> Right next to me, The World Radio & Television Handbook (WRTH).
>
> Not only AM, but SW, FM, and TV for every country in the world.
>
> 73's
> Richard Clark, KB7QHC

1804. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 03:12:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411ed5e8$1_8@corp.newsgroups.com>
Source record: 90925

Reg Edwards wrote:
> The more simple the construction of an antenna the more efficient it will
> be.

An isotropic is pretty simple but I don't know how to feed it. :-)

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1805. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 03:20:00 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <ADATc.7662$54.115767@typhoon.sonic.net>
Source record: 90926

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:rjjth0t5hmt7sk4hl3bbsufume1dupt5d2@4ax.com...
> On Sun, 15 Aug 2004 01:16:23 GMT, "Dave Pitzer" <dpitzer@sonic.net>
> wrote:
>
> >Does anyone know of a "good" listing/directory of either U.S. or North
> >American AM broacst band stations ---- with cross listings by call-sign,
> >frequency, location and possibly radiated power?
> >
> >In other words, a broadcast band DXer's "bible". There surely must be
> >one --- or is BCB DXing not the hobby it once was?
> >
> >Thanks,
> >
> >Dave Pitzer
> >=================
> >
> >
> >
>
> A good online source is:
>
> http://www.fcc.gov/mb/audio/amq.html
>
> where you can look up listings for cities, states, frequencies, or by
> call sign, or by radius around a certain locale, or by map coordinates
> if you know them -- with all pertinent info on each station.
>
> bob
> k5qwg

Got it! Thanks. WRTH is a bit of overkill for me. I couldn't care less about
TV in Kenya!

Dave P.
=============

1806. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 03:20:57 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <Q-SdnUS9xZUES4PcRVn-iw@adelphia.com>
Source record: 90927

"Bob Miller" <bxmillerNoSpam@texas.net> wrote in message
news:rjjth0t5hmt7sk4hl3bbsufume1dupt5d2@4ax.com...
> On Sun, 15 Aug 2004 01:16:23 GMT, "Dave Pitzer" <dpitzer@sonic.net>
> wrote:
>
> >Does anyone know of a "good" listing/directory of either U.S. or North
> >American AM broacst band stations ---- with cross listings by call-sign,
> >frequency, location and possibly radiated power?
> >
> >In other words, a broadcast band DXer's "bible". There surely must be
> >one --- or is BCB DXing not the hobby it once was?
> >
> >Thanks,
> >
> >Dave Pitzer
> >=================
> >
> >
> >
>
> A good online source is:
>
> http://www.fcc.gov/mb/audio/amq.html
>
> where you can look up listings for cities, states, frequencies, or by
> call sign, or by radius around a certain locale, or by map coordinates
> if you know them -- with all pertinent info on each station.
>
> bob
> k5qwg
>
>

another handy reference http://100000watts.com/

1807. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 04:28:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1foth0ppka47kv8q5sjbpivhp8ufj7rqg4@4ax.com>
Source record: 90928

On Sat, 14 Aug 2004 22:06:27 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Unless they have added a lot in the last 3 or 4 years, WRTH's domestic MW
>listings are pathetic*. White's Radio Log is long gone, unfortunately, so
>Dave's best bet is to contact the "National Radio Club" which specializes in
>BCB DX (until BPL and digital take care of that). Run NRC through Google,
>Dave, they have a large web presence.
>
>*example starting at the low end: WRTH lists 2 stations on 550 kHz. A very
>old (1975) pattern book from NRC lists 22 US stations.

Hi George,

84 pages of double column listings is pathetic? Compared to what?

I see 14 US stations listed for 550KHz not 2:
KENI
KQY
KUZZ
KRAI
WDUN
KFRM
KUSA
KBOW
WGR
KFYR
WKRC
KOAC
WJMW
KCRS

On a casual glance, the shortest listing for any AM frequency has 10
stations and the longest listing has 44 (and it is hard to tell if it
is the longest because there are so many of apparent equal length - in
at least 25 frequencies).

You are looking in the United States country listing for large
stations. The comprehensive coverage for all AM stations is found in
the back. Quite a difference!

73's
Richard Clark, KB7QHC

1808. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 04:57:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <M2CTc.200$pl.122@bignews3.bellsouth.net>
Source record: 90929

I would use the metal pipe as part of the conductor on that leg - it
wouldn't be pretty - metal pipe wound helically
;-)

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:411ecdc1_8@corp.newsgroups.com...
> Hal Rosser wrote:
> > I think the main problem you'll have is feeding the coax through PVC -
> > you'll likely get lots of rf onto the braid.
> > think about feeding through some metal pipe - to protect the coax from
> > induced rf
>
> As I understand it, he is feeding the coax through the center of
> the bottom helical coil. What's going to protect the coil from
> the metal pipe? :-)
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1809. Re: Vertical dipole, helically wound - comments?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 05:01:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <v6CTc.202$pl.145@bignews3.bellsouth.net>
Source record: 90930

how would helically wound stack up against one folded back on itself
(elongated 's')? both are linearly loaded yes-no?

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:411ed02a_8@corp.newsgroups.com...
> Reg Edwards wrote:
>
> > "Dale Parfitt" wrote
> >>Visit Reg Edward's site to see how to electrically shorten a radiator
with
> >>inductive loading.
> >
> > Hi Dale, yo took the words right out of mar mouf.
>
> There's a similar thread over on eHam.net.
> "RE: Linear loaded mobile antennas"
> "Reply by K0BG on August 11, 2004"
> "Loading coils DO NOT lengthen an antenna."
> Quoted from:
> http://www.w8ji.com/mobile_and_loaded_antenna.htm
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
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> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004

1810. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 06:55:34 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <pNDTc.296$pl.171@bignews3.bellsouth.net>
Source record: 90931

I wish someone WOULD come up with a 10-ft vertical for 80 meters with the same gain and bandwidth as a simple dipole

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message news:20040814190201.10759.00001227@mb-m13.aol.com...
> Howdy NGers,
>
> I was curious about another "miracle" short vertical, being subject of great
> interest, patent by Robert Vincent and Physics dept. of University of Rhode
> Island. I got up at 4 am, drove to Boxboro ARRL convention and eager to see
> what are we missing.
>
> Not much!
>
> Giveaway was opening statement something like: how to make shortened antenna
> with more gain (compare to what? I guess light bulb :-)
>
> In the "theoretical" portion of the presentation audience was told that current
> across the helical coil decreases away from the feed point, while across
> loading coil it stays constant. Due overcrowding of "inventor" I did not
> persist in breaking through and asking for enlightenment.
>
> Author claims more gain (familiar), better bandwidth (doesn't get it why) and
> small size (of course). Showing measured graphs with current and phase
> distribution along the radiator. Works very well! (Many stations worked.)
>
> He showed how to measure current at the antenna using ferrite pickup
> transformer way up the antenna and cables to the instrument (handsomely
> detuning and distorting the measurements).
>
> I suspect that "broad bandwidth", (SWR 2:1) was achieved thanks to losses in
> the coils and dielectric, as "confirmed" by his statement that coils were fried
> when power was applied.
>
> What is it? Basically helically wound coil starting from the base, about half

> way up the radiator, then piece of straight tubing, than loading coil,
then
> tubing and in some case top hat (works better :-). Matching to 50 ohms is
done
> by picking tap at the base, few coil turns up. That is 3D version.
>
> He showed some "2D" versions, having "coils" made of basically coil formed
as
> hairpin loops instead of classic solenoid, also the loading coil. So kind
of 2D
> - 3D antenna :-)
>
> I wanted to make a bet that my single loading coil loaded vertical would
cream
> the "miracle", but there were so many worshippers paying compliments to
the
> inventor, that I resigned not to stay for the second hour of lecture how
to
> build it.
>
> I saw no trace of any modeling, just experiments using wrong tools.
>
> So brace yourselves for another "miracle" in the arsenal of very small and
more
> efficient antennas. It should be a hit with CBers and other suckered
users.
>
> So that's it (oh, no chokes in the feedlines), I hope U of RI is proud of
this
> breakthrough, I can sleep well now. Back to DR1.
>
> Yuri, K3BU
> with more info that could have saved lotsa experimenting at
> http://www.k3bu.us/loadingcoils.htm

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Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004

1811. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 08:44:14 UTC
From: hwh <iimeeltje@hotmail.com.nospam>
Message-ID: <411f2277$0$93324$e4fe514c@news.xs4all.nl>
Source record: 90932

"Richard Fry" <rfry@adams.net> schreef in bericht
news:2o6d8jF7a4itU1@uni-berlin.de...
> Various types of "anti-fade" radiators are used by many of the 50kW
stations
> to try to minimize this effect.
>
> There is a tradeoff in the electrical height of the usual AM broadcast
> transmit antenna between producing the greatest groundwave and generating
an
> excessive high angle skywave that can interfere with that groundwave at
> night.
>
> A 225 degree vertical is about optimum for groundwave, but has a high
angle
> lobe that can cause this type of interference problem. A 195 degree
> vertical has less groundwave but little/no high angle lobe, and so is used
> by many full time 50kW stations. WJR, Detroit is an example of a station
> using a 195 degree vertical (700 foot guyed tower).
>
> Other antenna types also have been used for this, such as the "Franklin,"
> which is a sectionalized antenna with one vertical radiator above another,
> each driven separately.

Have a look at this:
http://www.waniewski.de/id35.htm

The text is in German, but the diagrams and photos show an aerial system
with its feed at 90 meters above ground level, to reduce skywave.
You can click through several pages at the top (1-15).

gr, hwh

1812. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 08:48:58 UTC
From: hwh <iimeeltje@hotmail.com.nospam>
Message-ID: <411f2394$0$559$e4fe514c@news.xs4all.nl>
Source record: 90933

"hwh" <iimeeltje@hotmail.com.nospam> schreef in bericht
news:411f2277$0$93324$e4fe514c@news.xs4all.nl...
> Have a look at this:
> http://www.waniewski.de/id35.htm
>
> The text is in German, except when you find the small flag and choose
English :-)

gr, hwh

1813. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 09:07:58 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <JJFTc.43407$Uh.7959@fed1read02>
Source record: 90934

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:411ed5e8$1_8@corp.newsgroups.com...
> Reg Edwards wrote:
> > The more simple the construction of an antenna the more efficient it
will
> > be.
>
> An isotropic is pretty simple but I don't know how to feed it. :-)

From the inside.

Ed
wb6wsn

1814. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 11:35:16 UTC
From: fractenna@aol.com
Message-ID: <20040815073516.11752.00003220@mb-m11.aol.com>
Source record: 90935

There were about 80 people at the talk, including a number of hams who are/were antenna professionals; academics; and so on. I was there for most of it; it was two hours and thus had the time frame for a substantial brief.

I saw and heard nothing that--in my opinion-- constitutes 'new' or 'revolutionary'. Although the statement "97% efficiency " was made for a shortened, DLM by Mr. Vincent, I saw no data that supported that claim. I did not see wide bandwidths in the data. The antennas are small. That claim is supported.

I did not see any evidence of improvement over the extant art of distributed loading. What I saw essentially confirms my earlier comments from June and July in this forum. Note: I was not aware of Mr. Vincent's design for the DLM until yesterday.

If I missed something, or make a statement here that is factually inaccurate regarding the statements of Mr. Vincent, apologies ahead of time; and please fill me in on this forum.

As promised earlier relative to the extant prior art: I draw reference to an existing, patent pending, commercial antenna by our friends at Astatic (the microphone company). It is sold by Omnitronics. It is called the "3K Antenna". The antenna is targeted for CB'ers and truckers, but it also works and is used, by hams on 10M. It , in appearance, looks identical to some of the DLM antennas Mr. Vincent presented. There is an inside cutaway which shows, in part , a vertically oriented helix (linear load); a "midsection"; a loading coil; and a top whip. I have one here. See:

http://www.astatic.com

Mr. Vincent confirmed that he was unaware of the Astatic antenna until I mentioned it to him yesterday.

I have offered to elaborate on a critique of Mr. Vincent's technology on the web, which I will produce, if needed. It may not be necessary for me to educate this way, as a number of people were/are capable of such assessments based on the info provided, and Mr. Vincent stated that he will post the PPT of the talk on the web. Doubtless there will be further independent discussion.

Just as a matter of protocol, in a public talk that has benefited from many years of guidance under an academic physics department, may I make the following brief (albeit not complete) suggestions:

1) Understand that a widely spaced helix has air cooling such that the cooling rate can substantially exceed the heating rate. Therefore the helix may dissipate heat and does not heat up much. That does not mean the system is lossless, nor that the efficiency through the helix is high.

2) Never claim that the efficiency of any electronic component as 100% ("lossless through the helix") just because the current profile stays relatively flat across it, and it doesn't burn up.

3) We have all used chicken wire(as ground screens), but may it strongly be discouraged. The losses are frequency dependent and often high;

4) Do not discount any ground counterpoise--especially one with 1/8 wave radials as being --in considering monopoles. It is an antenna system. This is part of the system;

5) Avoid PVC in monopole construction. At some frequencies the losses are reasonable, at others it is high. It varies from manufacturer; thickness; and so on.

6) Do not compare gains on a thin-wire type 1/4 wave monopole to a thick (diameter) helix-based antenna with a far larger electrical length, over a lossy, small counterpoise, and infer the efficiency.

7) Do not use wood in the near field when using MF/HF for probe measurements.

My brief thoughts at moment. More later if needed.

73,
Chip N1IR

1815. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 11:39:30 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <SXHTc.313993$XM6.135446@attbi_s53>
Source record: 90936

Richard Clark wrote:
> On Sat, 14 Aug 2004 01:08:12 GMT, Dave Shrader

SNIP

h, but let's get
> extravagant and say 0.1%; then both strikes express all of 150
> milli-watt-seconds of power.

Richard, I'm not going to try to out calculate you.

But, please tell the group what the junction temperature of any semiconductor device is at transient thermal failure at 0.1 and 1.0 useconds.

Twenty years ago the USAF test data indicated that failure occurred at 0.5 microjoules!!! That's 300,000 times more sensitive than your numbers.

Note, it is extremely difficult to really achieve a 0.001 ohm mechanical interconnect.

Secondly, the major electronic failure mode is from the coupling of the magnetic field. A di/dt of 10^5/[1E-6] yields a value of 10^11 amperes/second. A one foot length of wire has a self inductance of approximately one nanohenry [1*10^[-9]] and the di/dt impact is ... 100 volts peak from one end of the wire to the next.

Back in the olden days, twenty years ago, the action integral, that you calculated was sufficient to burn a 0.5 inch diameter hole right through titanium that was 0.1 inch thick. Note: the titanium alloy we used melts at slightly below 2000 degree F.

The design issue is TRANSIENT THERMAL EFFECTS not average heating. At 1 microsecond the heat flow from the stressed area has not started. The USAF required adiabatic heating as the peak temperature for the starting condition for the transient thermal analysis. Restated, all the energy is converted to instantaneous heat and then the thermal stress analysis would be performed under that constraint.

Conclusion, lightning is a highly stressful environment.

1816. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 12:01:23 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10huk30c77i8b54@corp.supernews.com>
Source record: 90937

Looks as if the 100000watts site charges a fee. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Tim Perry" <timperryspammenot@adelphia.net> wrote in message
news:Q-SdnUS9xZUES4PcRVn-iw@adelphia.com...

<snip>
> > >
> >
> > A good online source is:
> >
> > http://www.fcc.gov/mb/audio/amq.html
> >
> > where you can look up listings for cities, states, frequencies, or
by
> > call sign, or by radius around a certain locale, or by map
coordinates
> > if you know them -- with all pertinent info on each station.
> >
> > bob
> > k5qwg
> >
> >
>
> another handy reference http://100000watts.com/
>
>

1817. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 12:07:17 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2o91vjF7eo49U1@uni-berlin.de>
Source record: 90938

"Roy Lewallen" wrote
> Oops. I meant, WHEN RECEIVING, fiddling with the antenna or the
> antenna/feedline match won't have any effect at all on the line SWR. It
> will, of course, change the line SWR when transmitting.

However that doesn't mean that it's unimportant to match the feedpoint impedance of a rx antenna to the feedline connected there.

A rx antenna with a mismatched feedline will not deliver to the rx end of the feedline the maximum possible energy available from the fields in which that antenna is immersed. Whatever received power that is reflected by a mismatch at the rx antenna feedpoint is re-radiated (less losses).

RF

1818. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 13:02:55 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <RbU4rcS$71HBFAFj@ifwtech.co.uk>
Source record: 90939

Richard Fry wrote:
>"Roy Lewallen" wrote
>> Oops. I meant, WHEN RECEIVING, fiddling with the antenna or the
>> antenna/feedline match won't have any effect at all on the line SWR. It
>> will, of course, change the line SWR when transmitting.
>_____________
>
>However that doesn't mean that it's unimportant to match the feedpoint
>impedance of a rx antenna to the feedline connected there.
>
>A rx antenna with a mismatched feedline will not deliver to the rx end of
>the feedline the maximum possible energy available from the fields in which
>that antenna is immersed. Whatever received power that is reflected by a
>mismatch at the rx antenna feedpoint is re-radiated (less losses).

What both Roy and Richard say is correct in principle, but may be missing the point about what a receiver needs.

What's usually important is to present the RX input with the *source* impedance it was designed for. (Most often this is 50 ohms, and let's also assume 50-ohm line for the rest of this discussion.)

Likewise the transmitter needs to be presented with a 50-ohm load impedance, so those two requirements coincide.

In order to achieve a 50-ohm load impedance for the transmitter, and a 50-ohm source impedance for the receiver, the antenna itself must be matched to 50 ohms - so that's your design aim.

Now when Richard says:
> Whatever received power that is reflected by a
>mismatch at the rx antenna feedpoint is re-radiated (less losses),

that is true in principle, but more important is that if any energy is reflected from the receiver input, that is perfectly OK - that energy was "not wanted" by the receiver. The receiver *does* want a 50-ohm source, but it only takes what it needs from that source. For example, a simple tuned-gate FET amplifier only needs a voltage swing at the input - it doesn't need current as well, so most of the incident power is reflected. That type of situation is very common in receiver design, and completely OK.

It is a myth that a receiver input is not optimized unless it presents a 50-ohm load. What it does need is a 50-ohm source impedance. The design details about input reflection coefficient are much more complex, but

the underlying principle is simply "The RX input takes whatever it needs from a 50-ohm source, and reflects the rest."

RX inputs *can* be designed to present a 50-ohm load impedance, even with FETs, but this requires special design techniques that generally involve feedback. It is usually done when some other device has to be inserted between the feedline and the RX input, eg a filter which requires a 50-ohm load impedance. But that device probably requires a 50-ohm source impedance too, so you still have the same requirement for the antenna to be matched to the feedline.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1819. Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 13:24:27 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10hup23fk7gtt76@corp.supernews.com>
Source record: 90940
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running RG-8 to the balun. The dipole will be attached at 20' and the other end will be about 40'. My question is can the coax be tie-straped to the short end of the dipole antenna wire and run back with it toward the houes? This is basically to keep a big loop from hanging down and also keeping the wife happy since it would look much cleaner. I didn't know if this would have a large impact on operation or not.

73
Doug / KC8YEC

1820. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 13:34:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411f67ce$1_6@corp.newsgroups.com>
Source record: 90941

Hal Rosser wrote:
> I wish someone WOULD come up with a 10-ft vertical for 80 meters with the
> same gain and bandwidth as a simple dipole

Heck Hal, a 66 ft. vertical for 80m doesn't even have
the same gain as a dipole.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1821. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 13:39:17 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <9lJTc.20278$cT6.17035@fe2.columbus.rr.com>
Source record: 90942
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

A quick look in the Handbook will show you that the feed line is suppose to be
perpendicular to the dipole
BUT,
I think you should put it up like you described and then report back on the kind of results
you get.
73
Richard WB8KRN

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10hup23fk7gtt76@corp.supernews.com...
> I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running
> RG-8 to the balun. The dipole will be attached at 20' and the other end will
> be about 40'. My question is can the coax be tie-straped to the short end
> of the dipole antenna wire and run back with it toward the houes? This is
> basically to keep a big loop from hanging down and also keeping the wife
> happy since it would look much cleaner. I didn't know if this would have a
> large impact on operation or not.
>
> 73
> Doug / KC8YEC
>
>

1822. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 13:48:29 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10huraucrajtue2@corp.supernews.com>
Source record: 90944
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

"Richard Heindel" <rheindel@neo.rr.com> wrote in message
news:9IJTc.20278$cT6.17035@fe2.columbus.rr.com...
> A quick look in the Handbook will show you that the feed line is suppose
to be perpendicular to the dipole
> BUT,
> I think you should put it up like you described and then report back on
the kind of results you get.
> 73
> Richard WB8KRN
>
> "Doug Birky" <dgbirky@voyager.net> wrote in message
news:10hup23fk7gtt76@corp.supernews.com...
> > I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running
> > RG-8 to the balun. The dipole will be attached at 20' and the other end
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> > be about 40'. My question is can the coax be tie-straped to the short
end
> > of the dipole antenna wire and run back with it toward the houes? This
is
> > basically to keep a big loop from hanging down and also keeping the wife
> > happy since it would look much cleaner. I didn't know if this would have
a
> > large impact on operation or not.
> >
> > 73
> > Doug / KC8YEC
> >
> >
Hi Doug
If you're going to do that why not just make a coaxial antenna?
Peel back 20 feet of braid over the coax and add a 20 foot wire to the end
of the center conductor.
Forget the balun. Use a tuner.
I think dressing the feedline next to a radiator is problematic at best.
Just my 2 cents.......
73
H.
NQ5H

1823. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 14:03:38 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <_2KTc.22408$nx2.3777@newsread2.news.atl.earthlink.net>
Source record: 90943
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10hup23fk7gtt76@corp.supernews.com...
> I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running
> RG-8 to the balun. The dipole will be attached at 20' and the other end
will
> be about 40'. My question is can the coax be tie-straped to the short end
> of the dipole antenna wire and run back with it toward the houes? This is
> basically to keep a big loop from hanging down and also keeping the wife
> happy since it would look much cleaner. I didn't know if this would have a
> large impact on operation or not.
>
> 73
> Doug / KC8YEC
>
I saw an artical in a magazine once about doing something similar. The coax
was suspended a few inches below the dipole. I think but not sure that
somekind of choke was used on the coax near the end past the dipole to keep
the current off the outer portion of the coax.

1824. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 14:04:34 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411f6ec5_6@corp.newsgroups.com>
Source record: 90946
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Doug Birky wrote:
> My question is can the coax be tie-straped to the short end
> of the dipole antenna wire and run back with it toward the houes?

My comments assume this is a transmitting antenna.

Doing such will essentially short out the balun - not a good idea
and virtually guaranteeing common-mode problems. It would essentially
turn the antenna into a horizontal sleeve antenna which is unbalanced.

Even with the coax hanging down, this antenna will be a poor
performer as the SWR on the coax will be high as reported by
EZNEC. 40m 5:1, 30m 9:1, 20m 14:1, 17m 8:1, 15m 15:1, 12m 22:1,
10m 21:1. The free demo version of EZNEC is available from

http://www.eznec.com

My advice is to feed this antenna with 300 ohm balanced feedline
through a 1:1 choke at the antenna tuner.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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1825. QUAD Spreaders

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 14:06:47 UTC
From: wrhood@exis.net
Message-ID: <411f6d9c.4424098@news.exis.net>
Source record: 90945

FS - Aluminum QUAD Spreaders & 2nd Edition of W6SAI Cubical Quad book (1980). Will take to Shelby Hamfest, Sept. 4th. $5.00 Contact K4WYS. <wrhood@exis.net>

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1826. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 14:39:20 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10hutelcimgrn2a@corp.supernews.com>
Source record: 90947
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Thanks for all the input. This is the antenna I was planning to put up:
http://www.packetradio.com/windom.htm

H. Adam Stevens, NQ5H <NQ5H@ARRL.net> wrote in message
news:10huraucrajtue2@corp.supernews.com...
>
> "Richard Heindel" <rheindel@neo.rr.com> wrote in message
> news:9IJTc.20278$cT6.17035@fe2.columbus.rr.com...
> > A quick look in the Handbook will show you that the feed line is suppose
> to be perpendicular to the dipole
> > BUT,
> > I think you should put it up like you described and then report back on
> the kind of results you get.
> > 73
> > Richard WB8KRN
> >
> > "Doug Birky" <dgbirky@voyager.net> wrote in message
> news:10hup23fk7gtt76@corp.supernews.com...
> > > I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm
running
> > > RG-8 to the balun. The dipole will be attached at 20' and the other
end
> will
> > > be about 40'. My question is can the coax be tie-straped to the short
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> > > of the dipole antenna wire and run back with it toward the houes?
This
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> > > basically to keep a big loop from hanging down and also keeping the
wife
> > > happy since it would look much cleaner. I didn't know if this would
have
> a
> > > large impact on operation or not.
> > >
> > > 73
> > > Doug / KC8YEC
> > >
> > >
> Hi Doug
> If you're going to do that why not just make a coaxial antenna?
> Peel back 20 feet of braid over the coax and add a 20 foot wire to the end
> of the center conductor.

> Forget the balun. Use a tuner.
> I think dressing the feedline next to a radiator is problematic at best.
> Just my 2 cents.......
> 73
> H.
> NQ5H
>
>

1827. Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 15:02:38 UTC
From: "Ralph Blach"
Message-ID: <10huuo8a91fkn72@corp.supernews.com>
Source record: 90948

Does anybody have any good ideas for a good dual band
2 meter/440 antenna? This would be a base antenna and
should be capable of handling 200 watts.

Thanks

Chip

1828. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 15:16:59 UTC
From: arrow146@aol.com
Message-ID: <20040815111659.23951.00003872@mb-m28.aol.com>
Source record: 90949

```
<< Subject: Ideas for a home built 2meter/440 dual band base antenna
From: Ralph Blach rblach@NOSPAMintrex..XXXnet
Date: 15, Sunday August, 2004 8:02 AM
Message-id: <10huuo8a91fkn72@corp.supernews.com>

Does anybody have any good ideas for a good dual band
2 meter/440 antenna? This would be a base antenna and
should be capable of handling 200 watts. >>

<A HREF="http://www.arrowantennas.com/j-pole.html">OSJ 146/440</A>
```

1829. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 16:16:59 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2o9glnF828l0U1@uni-berlin.de>
Source record: 90950

"Ian White, G3SEK" wrote
>... the underlying principle is simply "The RX input takes
>whatever it needs from a 50-ohm source, and reflects the rest."

The above statement might be read as though there is a threshold voltage limit above which a receiver will not deliver improved performance.

A receiver amplifies and detects whatever voltage is present at its input terminals, if just thermal noise. Even if no current flows in the input stage device itself, the wanted signal voltage present there should be as high as possible above the thermal noise voltage in order to maximise SNR.

RF

1830. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 16:40:54 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <qmMTc.173275$fv.63565@fe2.columbus.rr.com>
Source record: 90951

This is a real easy antenna to make and works really well too.
http://www.arrowantennas.com/j-pole.html is the link that works.
73
Richard WB8KRN

"Arrow146" <arrow146@aol.com> wrote in message
news:20040815111659.23951.00003872@mb-m28.aol.com...
> << Subject: Ideas for a home built 2meter/440 dual band base antenna
> From: Ralph Blach rblach@NOSPAMintrex..XXXnet
> Date: 15, Sunday August, 2004 8:02 AM
> Message-id: <10huuo8a91fkn72@corp.supernews.com>
>
> Does anybody have any good ideas for a good dual band
> 2 meter/440 antenna? This would be a base antenna and
> should be capable of handling 200 watts. >>
>
>
> <A HREF="http://www.arrowantennas.com/j-pole.html">OSJ 146/440</A>

1831. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 17:31:38 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <tEVH8cd635HBFADV@ifwtech.co.uk>
Source record: 90952

Richard Fry wrote:
>"Ian White, G3SEK" wrote
>>... the underlying principle is simply "The RX input takes
>>whatever it needs from a 50-ohm source, and reflects the rest."
>_____
>
>The above statement might be read as though there is a threshold voltage
>limit above which a receiver will not deliver improved performance.
>

If you truly believe that danger exists, then please don't make it worse
by quoting my statement out of the context in which it was made.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1832. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 18:27:54 UTC
From: Dennis Kaylor <k4oxg@tampabay.rr.com>
Message-ID: <KWNTc.30766$4s6.1526@tornado.tampabay.rr.com>
Source record: 90953

i would suggest going to www.ac6v.com and clicking on antenna projects
or do a google search for dual band Jpole or copper cactus
good luck

Ralph Blach wrote:
> Does anybody have any good ideas for a good dual band
> 2 meter/440 antenna? This would be a base antenna and
> should be capable of handling 200 watts.
>
>
> Thanks
>
>
> Chip

1833. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 18:50:20 UTC
From: CW <"no adddress"@spam>
Message-ID: <LIOdnbqJNJ3tLYLcRVn-sA@comcast.com>
Source record: 90954

For many, the word "technology" means computers. That is not correct either.
Widespread ignorance does not change the facts.

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:ESsTc.25206$Jp6.24364@newsread3.news.atl.earthlink.net...
>
> "CW" <no adddress@spam free.com> wrote in message
> news:WZGdnapZ8o5kzIPcRVn-pA@comcast.com...
> > What part of "electromagnetic pulse" refers to nuclear blast?
> >
>
> For many that is what is thought of. Just as when someone mentions
dropping
> THE bomb. It is thought of as nuclear.
> An air burst is suspose to cause the EMP that will fry most electronics.
>
>
>

1834. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 18:53:19 UTC
From: CW <"no adddress"@spam>
Message-ID: <qpudnZGPCLy-LILcRVn-hQ@comcast.com>
Source record: 90955

Can you honestly say that an electromagnetic pulse cannot be generated by
anything but an atomic explosion?

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:2q3qh0h0oajevtnevcecgeb6ik1vv12d2t@4ax.com...
> On Sat, 14 Aug 2004 18:29:56 GMT, "Ralph Mowery"
> <rmowery28146@earthlink.net> wrote:
>
> >
> >"CW" <no adddress@spam free.com> wrote in message
> >news:WZGdnapZ8o5kzIPcRVn-pA@comcast.com...
> >> What part of "electromagnetic pulse" refers to nuclear blast?
> >>
> >
> >For many that is what is thought of. Just as when someone mentions
> dropping
> >THE bomb. It is thought of as nuclear.
> >An air burst is suspose to cause the EMP that will fry most electronics.
> >
> >
> For All,
>
> reference "The Electromagnetic Bomb (E-Bomb)":
> http://www.airpower.maxwell.af.mil/airchronicles/kopp/apjemp.html
>
> "The ElectroMagnetic Pulse (EMP) effect [1] was first observed
> during the early testing of high altitude airburst nuclear weapons
> [GLASSTONE64]. The effect is characterised by the production of a
> very short (hundreds of nanoseconds) but intense electromagnetic
> pulse, which propagates away from its source with ever diminishing
> intensity, governed by the theory of electromagnetism.
> ...
> "Even if the pulse is not powerful enough to produce thermal
> damage, the power supply in the equipment will readily supply
> enough energy to complete the destructive process. Wounded devices
> may still function, but their reliability will be seriously
> impaired. Shielding electronics by equipment chassis provides only
> limited protection, as any cables running in and out of the
> equipment will behave very much like antennae, in effect guiding
> the high voltage transients into the equipment."
>
> Note, the EMP of the Flux Compression Generator, an example of a
> tactical E-Bomb, is VASTLY richer in current unlike a lightning
> strike:

> "The FCG is a device capable of producing electrical energies of
> tens of MegaJoules in tens to hundreds of microseconds of time, in
> a relatively compact package. With peak power levels of the order
> of TeraWatts to tens of TeraWatts, FCGs may be used directly, or
> as one shot pulse power supplies for microwave tubes. To place
> this in perspective, the current produced by a large FCG is
> between ten to a thousand times greater than that produced by a
> typical lightning stroke [WHITE78]."
>
> However, these intense currents are not widely suitable for mission
> purposes for the same reasons of the Lightning's current pulse:
> "Whilst FCGs are potent technology base for the generation of
> large electrical power pulses, the output of the FCG is by its
> basic physics constrained to the frequency band below 1 MHz. Many
> target sets will be difficult to attack even with very high power
> levels at such frequencies..."
>
> Details abound in this paper, which I will leave to the student to
> absorb. Of particular note are the statements about coupling
> efficiency (unpredictable) and range (hundreds of meters).
>
> 73's
> Richard Clark, KB7QHC

1835. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 19:10:24 UTC
From: hwh <iimeeltje@hotmail.com.nospam>
Message-ID: <411fb55a$0$72638$e4fe514c@news.xs4all.nl>
Source record: 90956

"CW" <no adddress@spam free.com> schreef in bericht
news:qpudnZGPCLy-LILcRVn-hQ@comcast.com...
> Can you honestly say that an electromagnetic pulse cannot be generated by
> anything but an atomic explosion?

Lightning?

gr, hwh

1836. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 19:42:20 UTC
From: "aunwin@insightbb.com"
Message-ID: <w0PTc.262471$%_6.217@attbi_s01>
Source record: 90957

Did they mention where an actual drawing can be found
or if an indepth descriptive article can be found?
Thanks
Art
"Fractenna" <fractenna@aol.com> wrote in message
news:20040815073516.11752.00003220@mb-m11.aol.com...
> There were about 80 people at the talk, including a number of hams who
are/were
> antenna professionals; academics; and so on. I was there for most of it;
it was
> two hours and thus had the time frame for a substantial brief.
>
> I saw and heard nothing that--in my opinion-- constitutes 'new' or
> 'revolutionary'. Although the statement "97% efficiency " was made for a
> shortened, DLM by Mr. Vincent, I saw no data that supported that claim. I
did
> not see wide bandwidths in the data. The antennas are small. That claim is
> supported.
>
> I did not see any evidence of improvement over the extant art of
distributed
> loading. What I saw essentially confirms my earlier comments from June and
July
> in this forum. Note: I was not aware of Mr. Vincent's design for the DLM
until
> yesterday.
>
> If I missed something, or make a statement here that is factually
inaccurate
> regarding the statements of Mr. Vincent, apologies ahead of time; and
please
> fill me in on this forum.
>
> As promised earlier relative to the extant prior art: I draw reference to
an
> existing, patent pending, commercial antenna by our friends at Astatic
(the
> microphone company). It is sold by Omnitronics. It is called the "3K
Antenna".
> The antenna is targeted for CB'ers and truckers, but it also works and is
used,
> by hams on 10M. It , in appearance, looks identical to some of the DLM
antennas
> Mr. Vincent presented. There is an inside cutaway which shows, in part , a

> vertically oriented helix (linear load); a "midsection"; a loading coil;
and a
> top whip. I have one here. See:
>
> http://www.astatic.com
>
> Mr. Vincent confirmed that he was unaware of the Astatic antenna until I
> mentioned it to him yesterday.
>
> I have offered to elaborate on a critique of Mr. Vincent's technology on
the
> web, which I will produce, if needed. It may not be necessary for me to
educate
> this way, as a number of people were/are capable of such assessments based
on
> the info provided, and Mr. Vincent stated that he will post the PPT of the
talk
> on the web. Doubtless there will be further independent discussion.
>
> Just as a matter of protocol, in a public talk that has benefited from
many
> years of guidance under an academic physics department, may I make the
> following brief (albeit not complete) suggestions:
>
> 1) Understand that a widely spaced helix has air cooling such that the
cooling
> rate can substantially exceed the heating rate. Therefore the helix may
> dissipate heat and does not heat up much. That does not mean the system is
> lossless, nor that the efficiency through the helix is high.
>
> 2) Never claim that the efficiency of any electronic component as 100%
> ("lossless through the helix") just because the current profile stays
> relatively flat across it, and it doesn't burn up.
>
> 3) We have all used chicken wire(as ground screens), but may it strongly
be
> discouraged. The losses are frequency dependent and often high;
>
> 4) Do not discount any ground counterpoise--especially one with 1/8 wave
> radials as being --in considering monopoles. It is an antenna system. This
is
> part of the system;
>
> 5) Avoid PVC in monopole construction. At some frequencies the losses are
> reasonable, at others it is high. It varies from manufacturer; thickness;
and
> so on.
>
> 6) Do not compare gains on a thin-wire type 1/4 wave monopole to a thick
> (diameter) helix-based antenna with a far larger electrical length, over

a
> lossy, small counterpoise, and infer the efficiency.
>
> 7) Do not use wood in the near field when using MF/HF for probe
measurements.
>
> My brief thoughts at moment. More later if needed.
>
> 73,
> Chip N1IR

1837. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 19:51:00 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0408151151.6326eb5a@posting.google.com>
Source record: 90958

Hello again,

Well, surprise, surprise...the thread deviates again! Hehe.

If i may add to the discussion:

By "reciprocity", a transmit antenna can also be used as
a receive antenna, assuming you want the same polar pattern.

A mismatch on the receive side will adversely affect the signal
to noise ratio, or would increase the noise factor of the system (which
is why you always want your low noise amplifiers as close to the
receive antenna as possible, usually mast-mounted, to avoid the
losses of a long coax).

However, at the very least, the mismatch on the receive side
will not result in catastrophic destruction of your output transistors,
which is what a mismatch on the output of a transmitter can result in.

So one mismatch is a bit more serious than the other.

Slick

1838. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 20:19:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <kzPTc.11432$SC1.5039@nwrddc03.gnilink.net>
Source record: 90959

"Dr. Slick" <radio913@aol.com> wrote in message
news:1d15af91.0408151151.6326eb5a@posting.google.com...
> Hello again,
>
> Well, surprise, surprise...the thread deviates again! Hehe.
>
> If i may add to the discussion:
>
> By "reciprocity", a transmit antenna can also be used as
> a receive antenna, assuming you want the same polar pattern.
>
> A mismatch on the receive side will adversely affect the signal
> to noise ratio, or would increase the noise factor of the system (which
> is why you always want your low noise amplifiers as close to the
> receive antenna as possible, usually mast-mounted, to avoid the
> losses of a long coax).
>
> However, at the very least, the mismatch on the receive side
> will not result in catastrophic destruction of your output transistors,
> which is what a mismatch on the output of a transmitter can result in.
>
> So one mismatch is a bit more serious than the other.
>
>
> Slick

Slick

I'd submit that, in a practical situation, the mismatch of an antenna for
receiving can be as high as 2:1 or even 3:1 without degrading the strength
of the received signal when the transmission line losses are low. I
thought that, if the receiver is tuneable, the actual impedance the
transmission line presents to the receiver can be 'accounted for. I
thought that, for a given antenna and transmission line, the effects of VSWR
are less important that for delivering power by a transmitter.
Am I wrong when I consider VSWR to be less important for receivers than
for transmitters?

Jerry

1839. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 20:23:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rtcvh0tvmnbhns91iaf4f1g2j3ltks2a2t@4ax.com>
Source record: 90960

On Sun, 15 Aug 2004 11:39:30 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:

>Richard, I'm not going to try to out calculate you.
>
>But, please tell the group what the junction temperature of any
>semiconductor device is at transient thermal failure at 0.1 and 1.0
>useconds.

That was covered in another posting.

>Twenty years ago the USAF test data indicated that failure occurred at
>0.5 microjoules!!! That's 300,000 times more sensitive than your numbers.

Current USAF lore holds, rightly, that it is the power supply that
fulfills the failure, junction penetration energy is insufficient to
accomplish this. Turn off the equipment, disconnect leads and NOTHING
HAPPENS! Same pulse = no damage. Damage is not found in the
miniscule power it is found in poor practices.

Shielding is rather simple to accomplish, and taking care of front
door and back door paths is not Rocket Surgery. It takes very little
imagination to withstand these pulses; unfortunately it takes even
less imagination to succumb. The stories of 1 idiot's plight make the
news, not the 1 million survivors' success.

>Note, it is extremely difficult to really achieve a 0.001 ohm mechanical
>interconnect.

For you perhaps, and certainly others who experience lightning's
catastrophic failure, but 1mOhm is no big deal - measuring it is
however. It is simple to enumerate poor examples, but that does not
pass as careful accomplishment being impossible or unlikely.

>Secondly, the major electronic failure mode is from the coupling of the
>magnetic field. A di/dt of 10^5/[1E-6] yields a value of 10^11
>amperes/second. A one foot length of wire has a self inductance of
>approximately one nanohenry [1*10^[-9]] and the di/dt impact is ... 100
>volts peak from one end of the wire to the next.

You are pencil whipping yourself, Dave. You are off by at least 1
order of magnitude in inductance.

As current USAF lore to this matter reveals (and it is nigh on to 25
years stale), huge pulse coupled currents at low frequencies do a
piss-poor job plain and simple.

Saying coupling and making it happen are two different things (per current USAF lore) and trying to fit 1MHz into a 1 foot wire is loath to considerably less potential. This is called overplaying your hand, a direct strike is enough to argue.

>Back in the olden days, twenty years ago, the action integral, that you
>calculated was sufficient to burn a 0.5 inch diameter hole right through
>titanium that was 0.1 inch thick. Note: the titanium alloy we used
>melts at slightly below 2000 degree F.

I've already commented to this specifically.

>The design issue is TRANSIENT THERMAL EFFECTS not average heating. At 1
>microsecond the heat flow from the stressed area has not started.

I've already commented to this specifically.

> The
>USAF required adiabatic heating as the peak temperature for the starting
>condition for the transient thermal analysis. Restated, all the energy
>is converted to instantaneous heat and then the thermal stress analysis
>would be performed under that constraint.
>
>Conclusion, lightning is a highly stressful environment.

Stress also encompasses primitive fear and probably far more so than the actuality of failure. This is called the probability of big numbers. In a nation of 280 Million, any individual's once in a million experience like lightning striking them or near them happens 280 times a year (5 times a week or more) - it misses the other 279,999,720 times tho'. Thus such hair raising stories inordinately color the topic and are suitable for selling insurance and amulets. Hence the advertising and $$$$$$ suggested retail cost for "peace of mind." At that price, if only 0.01% of those 279,999,720 pushed their credit cards across the counter, that makes for a very profitable living second only to ENRON.

Moral: "Don't use insulated towers."
Risk: "How well can you reduce R?"

73's
Richard Clark, KB7QHC

1840. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 20:39:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pihvh0dbqnoa4b4s7lmc8ou2v1tg6tdmia@4ax.com>
Source record: 90961

On Sun, 15 Aug 2004 11:53:19 -0700, "CW" <no adddress@spam free.com>
wrote:

> Can you honestly say that an electromagnetic pulse cannot be generated by
>anything but an atomic explosion?
>

Hi OM,

I can honestly say that an EMP can be generated by walking across a
wool carpet and touching a faucet handle. I could describe striking a
match as a conflagration or dropping a glass as a shattering
experience.

The term EMP is derived from a truly BIG event with truly BIG
consequences. Trying to elevate smaller examples and saying the
outcome is equal, is not honest at all. The nuclear EMP is orders of
magnitude higher in frequency and currents BOTH compared to lightning.
Saying that the EMP of lightning will cause the same disabilities has
been thoroughly discounted by sheer lack of evidence. We've had both
electronic gear and lightning for a long time, and no one noticed EMP
until they dropped The Bomb. Now, EMP is like sighting Elvis.

I have vaporized a screwdriver with far, far less current than
lightning has found its way unscathed through smaller radius wire.
The recitation of astounding numbers does not make an argument. Even
the Air Force's E-Bombs show they can eclipse lighting's current, to
no greater destruction (which was not particularly effective in the
first place).

73's
Richard Clark, KB7QHC

1841. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 21:18:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411fd476$1_4@corp.newsgroups.com>
Source record: 90963

CW wrote:
> Can you honestly say that an electromagnetic pulse cannot be generated by
> anything but an atomic explosion?

An electromagnetic pulse can be generated by a time domain
reflectometer.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1842. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 21:21:31 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411fd52a$1_4@corp.newsgroups.com>
Source record: 90964

Jerry Martes wrote:
> Am I wrong when I consider VSWR to be less important for receivers than
> for transmitters?

Depends upon the source of the noise. My 40m vertical couldn't
copy stations that gave me an RST of 559.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1843. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 21:23:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <411fd5ac$1_4@corp.newsgroups.com>
Source record: 90965

SpamHog wrote:
> I. I am building a T2FD, for receiving and *maximum* 10W RF out.

10W out of the antenna or 10W out of the transmitter? With a
T2FD, there is a very large difference on certain frequencies.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1844. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 21:24:03 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <DtidnXoSAYDsSYLcRVn-rQ@gwi.net>
Source record: 90962
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

Doug Birky wrote:
> I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running
> RG-8 to the balun. The dipole will be attached at 20' and the other end will
> be about 40'. My question is can the coax be tie-straped to the short end
> of the dipole antenna wire and run back with it toward the houes? This is
> basically to keep a big loop from hanging down and also keeping the wife
> happy since it would look much cleaner. I didn't know if this would have a
> large impact on operation or not.
>
> 73
> Doug / KC8YEC
>
>
Hi Doug,

I'm Running the Windom (OFCD) it identical to what your saying. but
you'll find that the coax needs to come off the antenna in pretty much a
90 degree angle. ohterwise you will end up with lots of fedline
radiation which will cause problems in the shack.
73 Dave kc1di

1845. Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 21:50:24 UTC
From: N4IXT <n4ixt@mindspring.com>
Message-ID: <AUQTc.23089$nx2.5895@newsread2.news.atl.earthlink.net>
Source record: 90966

A recent storm broke a limb over which one end of my 20 meter dipole was strung up. I also have a 10 meter dipole that I haven't been entirely happy with it's location. Since I have to put one end back up anyway...

I'm thinking of putting them side by side on the rope, as I have a lot of space between the trees. Something like:

Tree--Rope--20m--short_rope--10m--Rope--Tree

I only plan on operating one antenna at a time. Anyone forsee any problems with this layout? I was a tad worried about the lobes coming off the ends in the middle might have problems.

Oh, they will be about 40 to 45 feet off the ground.

Thanks,

Robert / N4IXT

1846. Re: "Miracle" DLM RI short vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 22:10:49 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040815181049.25456.00003175@mb-m29.aol.com>
Source record: 90967

>
>
>I've often wondered at exactly what crossover point a helical coil
>turns into a loading coil. If one adds a one inch stinger to a helical
>coil, does that turn it into a loading coil? How about a one foot stinger?
>Is a one foot long loading coil not a helical coil? Does a one foot long
>loading coil really have less phase shift than a one foot long piece of
>wire? On a center-loaded mobile antenna, how can the ARCCOS of the current
>at the feedpoint be zero degrees and the ARCCOS of the current at the tip
>be 90 degrees without there being 90 degrees between the feedpoint and the
>tip? (When are you going to invite everyone over to Bar-B-Q that sacred cow?)
>--
>73, Cecil http://www.qsl.net/w5dxp

We have to wait for the patent 'splaining the "miracle".
One thing I "discovered" that winding the wire either as a coil or simply
taping it to the wood or plastic dielectric detunes the heck of it (losses,
making it look more "broadband"). I taped the wire of quarter wave vertical to
the bamboo pole, and it was way off resonance. When I put plexiglass spacers,
insulators, bingo, right on frequency.
Coil is a coil and in the antenna circuit it behaves that way.
One thing is comapring quarter wave electrical length (loaded) radiator to
quarter wave monopole, another thing is making it electrically longer, loading
it and then comparing to quarter wave radiator. From presentation it was hard
to judge what exactly was DLM electrically equivalet to.

We might have clinic on verticals over "perfect" salty water soon, we are
closing on waterfront property near the Ocean Gate old AT&T huge Rhombic
antenna farm and looking for some juicy coiled sausage to BBQ.

I think that hanging cow bell and flourescent light on the DLM would make it
one class better, maybe 120% efficient antenna :-)

What will they think of next?

73 Yuri, K3BU.us

1847. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 22:21:57 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040815182157.25456.00003176@mb-m29.aol.com>
Source record: 90968

>Did they mention where an actual drawing can be found
>or if an indepth descriptive article can be found?
>Thanks
>Art

What I described, says it all. The variation from the helically wound coil at the bottom half of the radiator is the trombone like "coil" or loading stubs. Looks like one or two turn trombone loading stubs along the radiator. This should model in EZnec and show how the current decreases. Not much different from the loading coil at the base, which any mobile aficionado knows is the worst place to put the loading coil at.
Again. It is vertical, working against radials, or screen, loaded at the base with helical coil or trombone, then piece of tubing, then loading coil, than piece of tubing (stinger) or top hat. You can play with any sizes you like, it will not beat "classic" whip with loading coil about 2/3 up the radiator.

When the patent is issued and published, you will be able to see where the "secret" is. He promised to have something on the web site, but I did not bother to take a note of it.

73 Yuri, K3BU.us
www.computeradio.us home of Dream Radio One

1848. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 23:06:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10hvr341d9q0k07@corp.supernews.com>
Source record: 90969

Jerry Martes wrote:
>
> I'd submit that, in a practical situation, the mismatch of an antenna for
> receiving can be as high as 2:1 or even 3:1 without degrading the strength
> of the received signal when the transmission line losses are low. I
> thought that, if the receiver is tuneable, the actual impedance the
> transmission line presents to the receiver can be 'accounted for. I
> thought that, for a given antenna and transmission line, the effects of VSWR
> are less important that for delivering power by a transmitter.
> Am I wrong when I consider VSWR to be less important for receivers than
> for transmitters?
>
> Jerry

It sounds like you (and some other posters) might be confusing the transmission line SWR with the impedance seen by the transmitter/receiver, which is often indicated with an SWR meter. The two aren't the same.

Consider, for example, a 50 ohm antenna and 50 ohm tx/rx, with a 300 ohm half wavelength transmission line connecting the two. The antenna sees a perfect match (50 ohms) when receiving, and the transmitter sees a perfect match (50 ohms) when transmitting. The transmission line SWR is 6:1 when transmitting and receiving. On the other hand, if the antenna and transmission line are both 300 ohms (+ j0), the line SWR will be 1:1 when transmitting, 6:1 when receiving. And so forth.

The effects of impedance mismatch seen by the transmitter when transmitting, the impedance mismatch seen by the antenna when receiving, and the transmission line SWR are three separate issues. Each has its own effect on system performance, and each needs to be treated separately. The importance of one or the other depends on the individual situation.

Roy Lewallen, W7EL

1849. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 23:39:21 UTC
From: "aunwin@insightbb.com"
Message-ID: <JuSTc.16346$mD.14453@attbi_s02>
Source record: 90970

Yuri
What I find hard to understand is that the University has placed its name behind it.!
The professors at the university had years to review the design and I presume stood behing it.
I also understand that actual measurements were taken albiet possibly with misuse of equipment..
I also find it odd that the ARRL did not get a jump on it before today as the inventor has connections with them.
and wide spread notice that he also was a ham. FCC is probably snickering now about ham operator statments
including those of the ARRL comments regarding use of power lines
Its a shame that the ARRL will take a laid back aproach on this antenna until they have had a chance
to review comments from elswhere. There must be something that was missed at the show possibly because of
a prior belief that it was a fake regardless of what he said. In the mean time I accept your analysis sinc eyou were there as was Chip.
Hopefully Tom W8TI was there and jotted down drawings from the' how to make' session so that he can point
out errors and falacies in the analysis from the first session where many graphs were presented of the findings
and possibly the technology behind it
Regards
Art

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message news:20040815182157.25456.00003176@mb-m29.aol.com...
> >Did they mention where an actual drawing can be found
> >or if an indepth descriptive article can be found?
> >Thanks
> >Art
>
> What I described, says it all. The variation from the helically wound coil at
> the bottom half of the radiator is the trombone like "coil" or loading stubs.
> Looks like one or two turn trombone loading stubs along the radiator. This
> should model in EZnec and show how the current decreases. Not much different
> from the loading coil at the base, which any mobile aficionado knows is the
> worst place to put the loading coil at.
> Again. It is vertical, working against radials, or screen, loaded at the

base
> with helical coil or trombone, then piece of tubing, then loading coil,
than
> piece of tubing (stinger) or top hat. You can play with any sizes you
like, it
> will not beat "classic" whip with loading coil about 2/3 up the radiator.
>
> When the patent is issued and published, you will be able to see where the
> "secret" is. He promised to have something on the web site, but I did not
> bother to take a note of it.
>
> 73 Yuri, K3BU.us
> www.computeradio.us home of Dream Radio One
>

1850. Re: Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 23:43:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cfoseg$av9$1@hercules.btinternet.com>
Source record: 90871

Operating an independent 10 meter diople in the near vicinity of a 20 meter
dipole will slightly affect the radiation patterns of both. There's no way
of detecting any differences from normal.

Reg, G4FGQ

==========

"N4IXT" <n4ixt@mindspring.com> wrote in message
news:AUQTc.23089$nx2.5895@newsread2.news.atl.earthlink.net...
> A recent storm broke a limb over which one end of my 20 meter dipole was
> strung up. I also have a 10 meter dipole that I haven't been entirely
happy
> with it's location. Since I have to put one end back up anyway...
>
> I'm thinking of putting them side by side on the rope, as I have a lot of
> space between the trees. Something like:
>
> Tree--Rope--20m--short_rope--10m--Rope--Tree
>
> I only plan on operating one antenna at a time. Anyone forsee any problems
> with this layout? I was a tad worried about the lobes coming off the ends
in
> the middle might have problems.
>
> Oh, they will be about 40 to 45 feet off the ground.
>
> Thanks,
>
> Robert / N4IXT
>
>

1851. Re: Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 23:45:52 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <JASTc.835$Yw6.187@bignews4.bellsouth.net>
Source record: 90872

that looks like end-to-end rather than side by side - and so I would think
is OK

"N4IXT" <n4ixt@mindspring.com> wrote in message
news:AUQTc.23089$nx2.5895@newsread2.news.atl.earthlink.net...
> A recent storm broke a limb over which one end of my 20 meter dipole was
> strung up. I also have a 10 meter dipole that I haven't been entirely
happy
> with it's location. Since I have to put one end back up anyway...
>
> I'm thinking of putting them side by side on the rope, as I have a lot of
> space between the trees. Something like:
>
> Tree--Rope--20m--short_rope--10m--Rope--Tree
>
> I only plan on operating one antenna at a time. Anyone forsee any problems
> with this layout? I was a tad worried about the lobes coming off the ends
in
> the middle might have problems.
>
> Oh, they will be about 40 to 45 feet off the ground.
>
> Thanks,
>
> Robert / N4IXT
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1852. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-15 23:57:02 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <iLSTc.14137$SC1.8465@nwrddc03.gnilink.net>
Source record: 90873

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10hvr341d9q0k07@corp.supernews.com...
> Jerry Martes wrote:
> >
> > I'd submit that, in a practical situation, the mismatch of an antenna
for
> > receiving can be as high as 2:1 or even 3:1 without degrading the
strength
> > of the received signal when the transmission line losses are low. I
> > thought that, if the receiver is tuneable, the actual impedance the
> > transmission line presents to the receiver can be 'accounted for. I
> > thought that, for a given antenna and transmission line, the effects of
VSWR
> > are less important that for delivering power by a transmitter.
> > Am I wrong when I consider VSWR to be less important for receivers
than
> > for transmitters?
> >
> > Jerry
>
> It sounds like you (and some other posters) might be confusing the
> transmission line SWR with the impedance seen by the
> transmitter/receiver, which is often indicated with an SWR meter. The
> two aren't the same.
>
> Consider, for example, a 50 ohm antenna and 50 ohm tx/rx, with a 300 ohm
> half wavelength transmission line connecting the two. The antenna sees a
> perfect match (50 ohms) when receiving, and the transmitter sees a
> perfect match (50 ohms) when transmitting. The transmission line SWR is
> 6:1 when transmitting and receiving. On the other hand, if the antenna
> and transmission line are both 300 ohms (+ j0), the line SWR will be 1:1
> when transmitting, 6:1 when receiving. And so forth.
>
> The effects of impedance mismatch seen by the transmitter when
> transmitting, the impedance mismatch seen by the antenna when receiving,
> and the transmission line SWR are three separate issues. Each has its
> own effect on system performance, and each needs to be treated
> separately. The importance of one or the other depends on the individual
> situation.
>
> Roy Lewallen, W7EL

Roy

It might be that I'm wrong with my conclusion that when receiving, the loss of received signal wont be appreciably worsened by VSWRs as high as, say, 3:1, when the line atenuation is under a couple DB. But I dont think I've been confused about the Line to Load Mismatch and VSWR.

I recognize that the lowest VSWR and lowest line loss and the lowest noise figure are all important.

Since I'm always working with systems that arent perfect, I dont get concerned with low VSWR when working with receivers except when there is need for phasing arrays. It is my understanding that the transmission line loss isnt increased excessively when the line loss is under about 2 DB and the VSWR is as high as 3:1, and that S-meter readings arent measureably degraded when the receiver sees these signals thats not coming in with a 50 ohm internal impedance.

It occurred to me that the original poster of this "Phasing Harness" might have some sophisticated need for phase or low mismatch. If the two antennas being harnessed are only to maximize radiation toward the horizon, I'd consider the question a simple one to answer. ie Feed them in phase with any convenient equal lengths of line. If bandwidth is a factor, expect sidelobes to vary with frequency.

But, my knowledge and experience is very limited, so any 'redirection' of my thinking is appreciated.

Jerry

1853. Re: Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 00:11:11 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <zYSTc.1044$og.169@nwrddc04.gnilink.net>
Source record: 90874

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:JASTc.835$Yw6.187@bignews4.bellsouth.net...
> that looks like end-to-end rather than side by side - and so I would think
> is OK
>
>That's how I read it too Hal- end to end. As each dipole will be in the
other's null they should be virtually invisible to each other.

Dale W4OP

1854. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 01:26:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cv20i0lpjsmjb94oij1r0hh0rahpr4m5cn@4ax.com>
Source record: 90875

On Sun, 15 Aug 2004 23:57:02 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>It is my understanding that the transmission line
>loss isnt increased excessively when the line loss is under about 2 DB and
>the VSWR is as high as 3:1, and that S-meter readings arent measureably
>degraded when the receiver sees these signals thats not coming in with a 50
>ohm internal impedance.

Hi Jerry,

It seems your question isn't going to be answered except to three
decimal places.

You are right, no one will notice much difference to mismatches such
as you describe. I know that your interest is in satellite plots of
weather conditions. You may experience some drop out - snow in the
picture. However this would be for marginal signals, and I am sure
that the uncorrelated noise would only slightly degrade the contrast
or detail.

I've played with WEFAX over HF to worse conditions and those pictures
came out quite readable.

73's
Richard Clark, KB7QHC

1855. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 02:09:49 UTC
From: Jim - NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <NHUTc.4749$LQ7.2064@newssvr27.news.prodigy.com>
Source record: 90876

'corse, from this "troublemaker", on VHF, (and granted, the noise figure of a reciever , or preamp is less compromised by swr, THE FURTHER from the SOURCE(antenna), because of the loss's in that line (great dummy load for 432: 200 foot of rg-58u, don't even terminate it! If a Bird reads ANY swr,meter has a problem (because of the loss)! But, then look at the loss's from the standpoint of a (Scatter, Moonbounce, Long Distance VHF (ect)) Operator, trying for the "HOLY GRAIL" of a BI-DIRECTIONAL 20 + dB gain, noise figure of less than , say 1.3 dB (sky noise), and a KW ,+ Minimum FEED LOSS'S, on 2 meters to hear your own echos. When at THAT point, and keep in mind:
1) that when stacking antennas, the MAXIMUM (maybe you know different) GAIN accomplished on a bay, is 3 dB , for 2 antennas, 6dB, for 4 antennas,ect., 2) that The Reciever front end, Maximized for BEST NOISE FIGURE, is adjusted to the that point, by intentionally MISADJUSTING the front end impedence, to obtain THAT optimum point,at 50 OHMS!
and 3) that anything that is misadjusted, to add ANY LOSS's to the system means the difference (because bad stacking distances, mis- fed coax(out of phase), change in the front end impedence of the LNA, ect.) means the difference between sucess,or failure!! Perhaps was wrong on initial assumption that swr was bi-directional, but doesn't negate the original premise that the swr has no effect on recieve-- and, btw, will the stacking actually provide THAT 3dB?? (before, or after the added 3:1 mismatch)?? Yours for comment?? Jim NN7K

Richard Clark wrote:
> On Sun, 15 Aug 2004 23:57:02 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>
>>It is my understanding that the transmission line
>>loss isnt increased excessively when the line loss is under about 2 DB and
>>the VSWR is as high as 3:1, and that S-meter readings arent measureably
>>degraded when the receiver sees these signals thats not coming in with a 50
>>ohm internal impedance.
>
>
> Hi Jerry,
>
> It seems your question isn't going to be answered except to three
> decimal places.
>
> You are right, no one will notice much difference to mismatches such
> as you describe. I know that your interest is in satellite plots of

> weather conditions. You may experience some drop out - snow in the
> picture. However this would be for marginal signals, and I am sure
> that the uncorrelated noise would only slightly degrade the contrast
> or detail.
>
> I've played with WEFAX over HF to worse conditions and those pictures
> came out quite readable.
>
> 73's
> Richard Clark, KB7QHC

1856. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 02:38:35 UTC
From: garigue <garigue@comcast.net>
Message-ID: <L6VTc.260523$a24.83575@attbi_s03>
Source record: 90877

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
news:aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com...
> The following QST from ARRL makes me sad. I recall working Bill, W9INN,
> on CW in the early days with my WT7AAN call and was thrilled to say I
> was using a W9INN 40/80 dipole. His antenna is still in use at my QTH
> with additional legs added for other bands. Bill was an asset to our
> hobby and will be missed. I learned a lot about antennas from his
> detailed instructions provided with each antenna and will always
> remember the smallest ad in QST from W9INN.
>
> Dick, AA5VU

Nice fellow ...may he rest in peace ....

KI3R Tom Popovic Belle Vernon Pa.

1857. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 03:12:31 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040815231231.22153.00001705@mb-m07.aol.com>
Source record: 90878

Institution or magazine is only as good as people in it. Obviously UofRI does not have RF department, otherwise the technician would not be the star "inventor", if they had even dummy like me, that would not fly out into the press release and patent office. (Well, you can patent anything now a days, but why waste money, unless you expect to fool some clueless buyers.)

ARRL and QST is slipping in quality and reviewing what goes out. See the wrong "wisdom" of distribution of current in the loading coils that was started by Belrose in the 50ies and propagated through Compendia and ARRL Antenna book and defended by W8JI till this modern times. There are more half baked articles showing up with time. Internet helps to discuss and correct some stuff, but seems that with time, we are getting more "experts" discovering perpetuum mobile and getting away with it.

Good thing it is only a hobby and some bright minds are still around at this NG :-)

73 Yuri

>
>Yuri
>What I find hard to understand is that the University has placed its name
>behind it.!
>The professors at the university had years to review the design and I
>presume stood behing it.
>I also understand that actual measurements were taken albiet possibly with
>misuse of equipment..
>I also find it odd that the ARRL did not get a jump on it before today as
>the inventor has connections with them.
>and wide spread notice that he also was a ham. FCC is probably snickering
>now about ham operator statments
> including those of the ARRL comments regarding use of power lines
>Its a shame that the ARRL will take a laid back aproach on this antenna
>until they have had a chance
> to review comments from elswhere. There must be something that was missed
>at the show possibly because of
>a prior belief that it was a fake regardless of what he said. In the mean
>time I accept your analysis sinc eyou were there as was Chip.
>Hopefully Tom W8TI was there and jotted down drawings from the' how to make'
>session so that he can point
>out errors and falacies in the analysis from the first session where many
>graphs were presented of the findings
>and possibly the technology behind it
>Regards
>Art

1858. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 03:32:05 UTC
From: CW <"no adddress"@spam>
Message-ID: <BKydnUS90fQpt73cRVn-rQ@comcast.com>
Source record: 90879

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:411fd476$1_4@corp.newsgroups.com...
> CW wrote:
> > Can you honestly say that an electromagnetic pulse cannot be generated
by
> > anything but an atomic explosion?
>
> An electromagnetic pulse can be generated by a time domain
> reflectometer.

Or a sparkplug.
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1859. Re: Speed of light slowing, retune your antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 05:20:53 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <47WdnblnWuSj2b3cRVn-og@adelphia.com>
Source record: 90880

```
"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:410FF475.90402@psu.edu...
> MikeWhy wrote:
> > "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> > news:410EA848.5040209@psu.edu...
> >
> >>Seems that shelly animals today actually have micro growth rings that
> >>happen on a daily basis. Some fossils have what *appear* to be such a
> >>thing, but he is being cautious before suggesting such.
> >
> >
> > He should be cautious. Internal structures of fossils would seem to be
quite
> > the contradiction. At least from my simplistic understanding of what
fossils
> > are, and how they came to be.
> >
>
> Indeed. There are only certain fossils that are applicable to this
> scrutiny. Those are ones that have fossilized in extremely fine
> sediment, where the individual particles are small enough to preserve
> the detail after replacement, and the rare fossils in which the nacre
> itself has managed to survive all this time.
>
> - Mike KB3EIA -
>

got me wondering now about an early form of organic computer found in France
called the Tri La byte
```

1860. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 05:23:55 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <ysidnffUtvBu2b3cRVn-vA@adelphia.com>
Source record: 90881

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:10huk30c77i8b54@corp.supernews.com...
> Looks as if the 100000watts site charges a fee. 73 Mac N8TT
>

it used to be free... ah well a Coke used to be a dime

1861. Re: Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 06:04:59 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <25h0i0hm977padd8p5k1c2sm8fbopfghro@4ax.com>
Source record: 90882

On Sun, 15 Aug 2004 21:50:24 GMT, "N4IXT" <n4ixt@mindspring.com>
wrote:

>
>I'm thinking of putting them side by side on the rope, as I have a lot of
>space between the trees. Something like:
>
>Tree--Rope--20m--short_rope--10m--Rope--Tree

In the _far_field_ the dipole would have a null in the direction of
the wire and thus, the connection between the dipoles would be
minimal.

If short_rope is much less than a wavelength, there are going to be
some near field influence on each other. Looking at the 14 MHz dipole
and ignoring the 14 MHz feedline for a while, there are two 5 m long
elements that are a half wavelength on 28 MHz, thus they are resonant
at 28 MHz.

...5m_section--X--isolator--Y--5m_section--short_rope--28MHz_dipole...

Since power is transferred via the near field, these two sections will
also reradiate and will work as additional point sources distorting
the radiation patterns into some directions. Depending on how tight
the coupling is between the 14 and 28MHz dipoles, this might or might
not be a problem.

Now look at the two 5 m sections of the 14 MHz dipole at 28 MHz. There
is a feedline connection at the right end of the leftmost section (X)
and also at the left end of the rightmost section (Y). Since the ends
of a half wave segment are the high impedance points and if some lossy
low impedance feeding arrangements as used (such as baluns, coax and
unpowered transmitters), some of the 28 MHz power transferred to the
20 m dipole is dissipated in these losses and not reradiated. This
will clean up the 28 MHz dipole pattern somewhat, but some transmitter
power is lost as heat in the 14 MHz dipole feed system.

A balanced open wire feed to the 14 MHz antenna with open circuit in
the shack should have minimal effect on the losses on 28 MHz, since
the power would simply be reflected back from the open end and
reradiated later on.

Paul OH3LWR

1862. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 08:16:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i0ra91g536lce@corp.supernews.com>
Source record: 90883

Jerry Martes wrote:
>
> It might be that I'm wrong with my conclusion that when receiving, the
> loss of received signal wont be appreciably worsened by VSWRs as high as,
> say, 3:1, when the line atenuation is under a couple DB. But I dont think
> I've been confused about the Line to Load Mismatch and VSWR.

As long as we make sure the readers understand we're talking about the actual SWR on the transmission line, that's true for both transmitting and receiving.

> I recognize that the lowest VSWR and lowest line loss and the lowest noise
> figure are all important.

If the VSWR and (matched) line loss are roughly within the bounds you mentioned, the transmission line VSWR isn't really important, since the extra loss it causes is generally negligible. However, as I somewhat indirectly mentioned earlier, the match between the antenna and its load determine the amount of signal that gets to the receiver. And as Ian has mentioned, the receiver noise figure might be best when the receiver is mismatched to the source impedance it sees. Further qualifying the matter is the fact that at HF, losing signal when receiving due to mismatch, line loss or SWR doesn't impact the signal/noise ratio unless the attenuation is very great, since the dominant atmospheric noise is attenuated by the same factor. I do realize, though, that the original posting was directed toward VHF or above, where those things do matter.
>
> Since I'm always working with systems that arent perfect, I dont get
> concerned with low VSWR when working with receivers except when there is
> need for phasing arrays. It is my understanding that the transmission line
> loss isnt increased excessively when the line loss is under about 2 DB and
> the VSWR is as high as 3:1, and that S-meter readings arent measureably
> degraded when the receiver sees these signals thats not coming in with a 50
> ohm internal impedance.
>
> It occurred to me that the original poster of this "Phasing Harness" might
> have some sophisticated need for phase or low mismatch. If the two antennas
> being harnessed are only to maximize radiation toward the horizon, I'd
> consider the question a simple one to answer. ie Feed them in phase with
> any convenient equal lengths of line. If bandwidth is a factor, expect
> sidelobes to vary with frequency.
>
> But, my knowledge and experience is very limited, so any 'redirection' of
> my thinking is appreciated.

Your thinking looks fine to me.

Roy Lewallen, W7EL

1863. Re: Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 11:44:02 UTC
From: N4IXT <n4ixt@mindspring.com>
Message-ID: <661Uc.27182$Jp6.20816@newsread3.news.atl.earthlink.net>
Source record: 90884

Thanks for all the replies!

It sounds as though if I keep "short_rope" over one wavelength in length
(which I can do), that would do the best job of minimizing loss.

73's de Robert / N4IXT

"Paul Keinanen" <keinanen@sci.fi> wrote in message
news:25h0i0hm977padd8p5k1c2sm8fbopfghro@4ax.com...
> On Sun, 15 Aug 2004 21:50:24 GMT, "N4IXT" <n4ixt@mindspring.com>
> wrote:
>
> > >
> > >I'm thinking of putting them side by side on the rope, as I have a lot of
> > >space between the trees. Something like:
> > >
> > >Tree--Rope--20m--short_rope--10m--Rope--Tree
>
> In the _far_field_ the dipole would have a null in the direction of
> the wire and thus, the connection between the dipoles would be
> minimal.
>
> If short_rope is much less than a wavelength, there are going to be
> some near field influence on each other. Looking at the 14 MHz dipole
> and ignoring the 14 MHz feedline for a while, there are two 5 m long
> elements that are a half wavelength on 28 MHz, thus they are resonant
> at 28 MHz.
>
> ...5m_section--X--isolator--Y--5m_section--short_rope--28MHz_dipole...
>
> Since power is transferred via the near field, these two sections will
> also reradiate and will work as additional point sources distorting
> the radiation patterns into some directions. Depending on how tight
> the coupling is between the 14 and 28MHz dipoles, this might or might
> not be a problem.
>
> Now look at the two 5 m sections of the 14 MHz dipole at 28 MHz. There
> is a feedline connection at the right end of the leftmost section (X)
> and also at the left end of the rightmost section (Y). Since the ends
> of a half wave segment are the high impedance points and if some lossy
> low impedance feeding arrangements as used (such as baluns, coax and
> unpowered transmitters), some of the 28 MHz power transferred to the
> 20 m dipole is dissipated in these losses and not reradiated. This
> will clean up the 28 MHz dipole pattern somewhat, but some transmitter
> power is lost as heat in the 14 MHz dipole feed system.

>
> A balanced open wire feed to the 14 MHz antenna with open circuit in
> the shack should have minimal effect on the losses on 28 MHz, since
> the power would simply be reflected back from the open end and
> reradiated later on.
>
> Paul OH3LWR
>

1864. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 13:06:57 UTC
From: "aunwin@insightbb.com"
Message-ID: <Rj2Uc.262423$a24.169595@attbi_s03>
Source record: 90885

You make some good points
Regards
Art
"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040815231231.22153.00001705@mb-m07.aol.com...
>
> Institution or magazine is only as good as people in it. Obviously UofRI
does
> not have RF department, otherwise the technician would not be the star
> "inventor", if they had even dummy like me, that would not fly out into
the
> press release and patent office. (Well, you can patent anything now a
days, but
> why waste money, unless you expect to fool some clueless buyers.)
>
> ARRL and QST is slipping in quality and reviewing what goes out. See the
wrong
> "wisdom" of distribution of current in the loading coils that was started
by
> Belrose in the 50ies and propagated through Compendia and ARRL Antenna
book and
> defended by W8JI till this modern times. There are more half baked
articles
> showing up with time. Internet helps to discuss and correct some stuff,
but
> seems that with time, we are getting more "experts" discovering perpetuum
> mobile and getting away with it.
>
> Good thing it is only a hobby and some bright minds are still around at
this NG
> :-)
>
> 73 Yuri
>
>
> >
> >Yuri
> >What I find hard to understand is that the University has placed its name
> >behind it.!
> >The professors at the university had years to review the design and I
> >presume stood behing it.
> >I also understand that actual measurements were taken albiet possibly
with
> >misuse of equipment..

> >I also find it odd that the ARRL did not get a jump on it before today as
> >the inventor has connections with them.
> >and wide spread notice that he also was a ham. FCC is probably snickering
> >now about ham operator statments
> > including those of the ARRL comments regarding use of power lines
> >Its a shame that the ARRL will take a laid back aproach on this antenna
> >until they have had a chance
> > to review comments from elswhere. There must be something that was
missed
> >at the show possibly because of
> >a prior belief that it was a fake regardless of what he said. In the mean
> >time I accept your analysis sinc eyou were there as was Chip.
> >Hopefully Tom W8TI was there and jotted down drawings from the' how to
make'
> >session so that he can point
> >out errors and falacies in the analysis from the first session where many
> >graphs were presented of the findings
> >and possibly the technology behind it
> >Regards
> >Art
>
>

1865. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 14:29:49 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <xx3Uc.20913$SC1.7606@nwrddc03.gnilink.net>
Source record: 90886

Yuri

Does this antenna have an upper limit on the frequency it'll operate at?
I'd think some real life data on efficiency could be derived from enclosing
anantenna in a 'big enough' styrofoam cooler type enclosure. If the parts
that *I* suspect to be lossy might cause a significant temperature rise with
several hundred watts fed to the antenna.

Jerry

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040815231231.22153.00001705@mb-m07.aol.com...
>
> Institution or magazine is only as good as people in it. Obviously UofRI
does
> not have RF department, otherwise the technician would not be the star
> "inventor", if they had even dummy like me, that would not fly out into
the
> press release and patent office. (Well, you can patent anything now a
days, but
> why waste money, unless you expect to fool some clueless buyers.)
>
> ARRL and QST is slipping in quality and reviewing what goes out. See the
wrong
> "wisdom" of distribution of current in the loading coils that was started
by
> Belrose in the 50ies and propagated through Compendia and ARRL Antenna
book and
> defended by W8JI till this modern times. There are more half baked
articles
> showing up with time. Internet helps to discuss and correct some stuff,
but
> seems that with time, we are getting more "experts" discovering perpetuum
> mobile and getting away with it.
>
> Good thing it is only a hobby and some bright minds are still around at
this NG
> :-)
>
> 73 Yuri
>
>
> >
> >Yuri
> >What I find hard to understand is that the University has placed its name

> >behind it.!
> >The professors at the university had years to review the design and I
> >presume stood behing it.
> >I also understand that actual measurements were taken albiet possibly
with
> >misuse of equipment..
> >I also find it odd that the ARRL did not get a jump on it before today as
> >the inventor has connections with them.
> >and wide spread notice that he also was a ham. FCC is probably snickering
> >now about ham operator statments
> > including those of the ARRL comments regarding use of power lines
> >Its a shame that the ARRL will take a laid back aproach on this antenna
> >until they have had a chance
> > to review comments from elswhere. There must be something that was
missed
> >at the show possibly because of
> >a prior belief that it was a fake regardless of what he said. In the mean
> >time I accept your analysis sinc eyou were there as was Chip.
> >Hopefully Tom W8TI was there and jotted down drawings from the' how to
make'
> >session so that he can point
> >out errors and falacies in the analysis from the first session where many
> >graphs were presented of the findings
> >and possibly the technology behind it
> >Regards
> >Art
>
>

1866. What is RF current?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 16:08:46 UTC
From: krt2054@charter.net
Message-ID: <33d49c4.0408160808.1e1595c7@posting.google.com>
Source record: 90887

Sorry for the dumb question, but I see the phrase "RF current" used in so many contexts that I am not sure what it is.

What I "think" it is, is:

1. The sinusoidal, voltage / current that is impressed on the, e.g., coax feedline's center conductor by the transmitter (a.k.a., generator)

2. The voltage / current on the conductive portion of the radiator

3. The sinusoidal, voltage / current that is picked up by the "other" conductive portion of the radiator (e.g., other pole of a dipole or the ground, radials or counterpoise system of a vertical antenna)

4. The sinusoidal, voltage / current that is returned to the transmitter via the shield of the coax.

5. The induced voltage / current in the counterpart of the receiving system.

6. The current that "flows" in a dielectric, otherwise known as displacement current, the original notion that allowed Maxwell to posit the existence of the ether.

That is, RF current is no difference than "current" except for its frequency.

What RF current is NOT is the transverse electromagnetic wave. That is, once the effect is in the ether there is no RF current.

Looking for confirmation or refutation of the specific points above.

Thanks.

Thomas

1867. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 16:31:38 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040816123138.04158.00002999@mb-m15.aol.com>
Source record: 90888

>
> Does this antenna have an upper limit on the frequency it'll operate at?
>I'd think some real life data on efficiency could be derived from enclosing
>anantenna in a 'big enough' styrofoam cooler type enclosure. If the parts
>that *I* suspect to be lossy might cause a significant temperature rise with
>several hundred watts fed to the antenna.
>
> Jerry
>

There is no limit on the operating frequency of any antenna. If you can feed RF into it, it will radiate. Question is where, pattern is determined by the electrical length of the radiator.
The real efficiency of shortened antenna should be indicated by the comparison with full size equivalent (or any other known type) and measured field strength, like it is done in mobile antenna shootouts.
Any RF energy lost in heat is not radiated and will show up in lower signal levels. It is important to compare antennas with the same radiation pattern and ground system.

Yuri, K3BU.us

1868. chain link fence

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 16:36:32 UTC
From: Wedgew <wedgew@rochester.rr.com>
Message-ID: <ko5Uc.151091$bp1.136983@twister.nyroc.rr.com>
Source record: 90889

my back yard is fenced(102 ft by 35 ft. chain link woith dug in
posts every 7 or 8 ft
could this be used as a counterpoise or as a ground?
--
OK!
What GeNiuS pUt thE CaPlocK KEy
RiGhT NeXt to The Shft KEY?

Seek not to confound me as I am dim-witted and slow of study.

Wedge KC2MGJ

1869. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 16:43:15 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10i1ovealhq08c2@corp.supernews.com>
Source record: 90890

... and I can remember when a coke went from a nickel to a dime. Tasted
better then too. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Tim Perry" <timperryspammenot@adelphia.net> wrote in message
news:ysidnffUtvBu2b3cRVn-vA@adelphia.com...
>
> "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> news:10huk30c77i8b54@corp.supernews.com...
> > Looks as if the 100000watts site charges a fee. 73 Mac N8TT
> >
>
> it used to be free... ah well a Coke used to be a dime
>
>

1870. Re: chain link fence

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:08:03 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <Sno4kjPznOIBFAPQ@ifwtech.co.uk>
Source record: 90891

Wedgew wrote:
>my back yard is fenced(102 ft by 35 ft. chain link woith dug in posts
>every 7 or 8 ft
>could this be used as a counterpoise or as a ground?

Top Band enthusiasts often bond everything imaginable to their ground system, so why not try it.

>OK!
>What GeNiuS pUt thE CaPlocK KEy
>RiGhT NeXt to The Shft KEY?
>

The same genius who put the function keys along the top of the keyboard, just out of reach when you're t7ping.

If the Caps Lock key bugs you as much as it bugs me, put some stiff foam under the key-cap, so it won't go down unless you really mean it.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1871. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:18:29 UTC
From: dgbirky@voyager.net
Message-ID: <e0206938.0408160918.45f1af29@posting.google.com>
Source record: 90892
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

KC1DI <elbc2@gwi.net> wrote in message news:<DtidnXoSAYDsSYLcRVn-rQ@gwi.net>...
> Doug Birky wrote:
> > I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running
> > RG-8 to the balun. The dipole will be attached at 20' and the other end will
> > be about 40'. My question is can the coax be tie-straped to the short end
> > of the dipole antenna wire and run back with it toward the houes? This is
> > basically to keep a big loop from hanging down and also keeping the wife
> > happy since it would look much cleaner. I didn't know if this would have a
> > large impact on operation or not.
> >
> > 73
> > Doug / KC8YEC
> >
> >
> Hi Doug,
>
> I'm Running the Windom (OFCD) it identical to what your saying. but
> you'll find that the coax needs to come off the antenna in pretty much a
> 90 degree angle. ohterwise you will end up with lots of fedline
> radiation which will cause problems in the shack.
> 73 Dave kc1di

Can you give me an indication about how long a lead I need before
running the coax back toward the house and into the radio? I'm going
to run the coax up the house and out to the feedpoint.

Doug

1872. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:36:27 UTC
From: fractenna@aol.com
Message-ID: <20040816133627.24808.00001401@mb-m16.aol.com>
Source record: 90893

> Does this antenna have an upper limit on the frequency it'll operate at?
>I'd think some real life data on efficiency could be derived from enclosing
>anantenna in a 'big enough' styrofoam cooler type enclosure. If the parts
>that *I* suspect to be lossy might cause a significant temperature rise with
>several hundred watts fed to the antenna.
>
> Jerry
>

No report , that I am aware, of Wheeler cap measurements. Antenna is
monochromatic and moderate/hi Q.

73,
Chip N1IR

1873. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:43:03 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <HMWdndOBtIGDb73cRVn-qA@comcast.com>
Source record: 90894

"Richard Fry" <rfry@adams.net> wrote in message
news:2o6d8jF7a4itU1@uni-berlin.de...
>
.....
.....
> Note also that the carrier frequency of the station, the conductivity
along
> the groundwave path, and skywave propagation conditions will have an
affect
> on the location of this zone, and the extent of interference there.
>
> R. Fry
> (WJR staff engineer, mid 1960s)
>
>
Richard, I think he is just too close for night time sky wave, and too far for ground wave. When I lived in western Ohio, I had no trouble picking up WABC with the built in loopstick. I have also picked up WABC in Bermuda and Florida. So, I don't doubt the 27 states coverage statement. I noiced I had trouble getting NY AM stations on the car radio in eastern PA.

BTW, You mentioned WJR. I can pick that up here in NJ, even though it is only 10 KHz from WABC, which is about 25 miles from me. All it takes is a receiver with *very* good selectivity. This is where the BC DX people bark up the wrong tree when they want more antenna gain. WLW (700) became problematic after WOR (710) went digital AM. They now broadcast hash at least +/- 20 KHz from the carrier.

Tam/WB2TT

1874. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:43:46 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <mn6Uc.3143$og.1883@nwrddc04.gnilink.net>
Source record: 90895

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040816123138.04158.00002999@mb-m15.aol.com...
> >
> > Does this antenna have an upper limit on the frequency it'll operate
at?
> >I'd think some real life data on efficiency could be derived from
enclosing
> >anantenna in a 'big enough' styrofoam cooler type enclosure. If the
parts
> >that *I* suspect to be lossy might cause a significant temperature rise
with
> >several hundred watts fed to the antenna.
> >
> > Jerry
> >
>
> There is no limit on the operating frequency of any antenna. If you can
feed RF
> into it, it will radiate. Question is where, pattern is determined by the
> electrical length of the radiator.
> The real efficiency of shortened antenna should be indicated by the
comparison
> with full size equivalent (or any other known type) and measured field
> strength, like it is done in mobile antenna shootouts.
> Any RF energy lost in heat is not radiated and will show up in lower
signal
> levels. It is important to compare antennas with the same radiation
pattern and
> ground system.
>
> Yuri, K3BU.us

Yuri

Youve gotten too refined. I mostly know about basic antenna theory and
modeling. But building a VHF model of a 40 meter antenna with #12 copper
wire wound around a 4 inch mandril might be impractical.
But, if the "wonder antenna" is small enough to be enclosed (mostly) in
something transparent to the RF but not to the thermal thats generated by
any I^2* R losses, wouldnt the temperture rise inside the enclosure give a
decent indication of efficiency?

If this "wonder antenna" designer claims to be able to shape the radiation
pattern with an antenna significantly shorter that a 1/4 wave stub, He
really has something. I suspect that the something he has is mental

illness.

I've been following this info on the RI antenna and have considered it to be so 'snake oilish' that it would never see the light of an auditorium.

Your post about attending the lecture made me wonder if anyone asked about *any* simple (approximations) measurements like the styrofoam radome to get some idea of the I^2*R power lost in the antenna. If he has an antenna, and a transmitter and enough room to build a foam igloo it seems that alot of data on efficiency could be obtained.
If I had any interest in describing an antenna I'd built, I'd at least use an infared thermometer on the section of the antenna suspected as being the most lossy.

Jerry

1875. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:50:12 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408160950.6f326ad@posting.google.com>
Source record: 90896

Cecil,

> 10W out of the antenna or 10W out of the transmitter? With a
> T2FD, there is a very large difference on certain frequencies.

Out of the TX. I know that the lower you go, the warmer the pigeon sitting on the resistor will get.

I tested the small neons I have. I basically found two types, one that clips at 60V, the other at 110V. I made a classic 4:1 balun and soldered one 60V between each balanced arm and common. I know it's like wearing suspenders and belt, but I don't think they will hurt at under 10W.

Also, in view of what I read, I understand Richard's claim that a T2FD will snuff out much of the energy anyway:

- if the spectrum of the AC induced by a near hit is mostly in the LF to MF range, the resistor will indeed take most of the heat, just as if the power were coming from the coax

- moreover, as I sized the windings for 4MHz and up, the balun itself will short to ground much of the leftover energy it does receive from a near hit.

1876. Re: What is RF current?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 17:57:53 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cfqsnj$9n4$1@newshost.mot.com>
Source record: 90903

Short response...

This pretty much describes what I think of when I hear the term. Current at a "high" frequency. An object for discussion will certainly turn out to be just when does the frequency get high enough to be considered RF and I will say that I think that depends on a lot of things, the first probably being wavelength, others being a matter of much discussion.

Verbose response...

Some pretty minor things...

RF Current, of course is the current, though you say "...voltage / current ..."

"sinusoidal"... If there are harmonics present, then there can be multiple sine waves and the resultant (superposition of them) won't look sinusoidal, but a sum of sines.

RE your #3:

I'd say that the current in a dipole (or ground plane, for that matter) is "pushed into" one side and "pulled out of" the other side (the sides alternating each half cycle) rather than being "picked up" by something considered to be an "other side". If the coax center conductor happens to be pushing at any given instant, then the shield is doing the accompanying pulling. If we view the dipole with a balanced feed line, then the push & pull may be easier to swallow. A dipole is balanced and there is a tendency to consider the coax shield to be at ground potential at all times. This is not correct and is at the root of a VERY large amount of discussion on these news groups...

An RF "circuit", if you will, requires two connections to the source, just like a bulb and battery. The rest of the "complete circuit" isn't as obvious with RF -- as you appear to understand.

I also suspect you MAY get some discussion on displacement current since it isn't being carried by the classical electrons-in-a-wire, but if the current is present on both sides of the displacement current medium (say, a capacitor dielectric), then there certainly must be RF current getting through it somehow, so to speak.

RE the EM wave. I also think this is correct. You have the fields present as though the voltages and currents were doing their thing, but there ain't no electrons in space. This is a fascinating symbiotic (sp) relationship, indeed...

73,
--
Steve N, K,9;d, c. i My email has no u's.

"Thomas" <krt2054@charter.net> wrote in message
news:33d49c4.0408160808.1e1595c7@posting.google.com...
> Sorry for the dumb question, but I see the phrase "RF current" used in
> so many contexts that I am not sure what it is.
>
> What I "think" it is, is:
>
> 1. The sinusoidal, voltage / current that is impressed on the, e.g.,
> coax feedline's center conductor by the transmitter (a.k.a.,
> generator)
>
> 2. The voltage / current on the conductive portion of the radiator
>
> 3. The sinusoidal, voltage / current that is picked up by the "other"
> conductive portion of the radiator (e.g., other pole of a dipole or
> the ground, radials or counterpoise system of a vertical antenna)
>
> 4. The sinusoidal, voltage / current that is returned to the
> transmitter via the shield of the coax.
>
> 5. The induced voltage / current in the counterpart of the receiving
> system.
>
> 6. The current that "flows" in a dielectric, otherwise known as
> displacement current, the original notion that allowed Maxwell to
> posit the existence of the ether.
>
> That is, RF current is no difference than "current" except for its
> frequency.
>
> What RF current is NOT is the transverse electromagnetic wave. That
> is, once the effect is in the ether there is no RF current.
>
> Looking for confirmation or refutation of the specific points above.
>
> Thanks.
>
> Thomas

1877. Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:05:41 UTC
From: "aunwin@insightbb.com"
Message-ID: <VH6Uc.324209$XM6.205186@attbi_s53>
Source record: 90897

Gentlemen
I have in the past alluded not only radiation from a straight element but also the ADDITION of radiation
occuring from a bent element. Nobody has commented on the authentisity of this statement and I have not come acros anything in my own collection of books.
Now my present antenna consists of various loops connected in both a clockwise and clockwise radiation form such that the circular polarisation cancells leaving pure vertical polarisation.. The loops are separatred in a way that intercapacity of the spiral loops is reduced as well as circular cancellation All of this is based on my gut feeling that R.F.current flowing around a circular radiating element. What I ask for for those who have a deeper background of R.F. is verification of my assumption
that extra radiation becomes available.
Appreciate any comments on this irregular aproach as I cxannot find guidance in the books.
A serious question regarding added radiation from an element in the hope that insight is provided even tho it may expose the fallacy of my aproach.
Thanks in advance
Art

1878. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:09:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f2t1i01lut15f2gl9e9019ti7d8pprpegg@4ax.com>
Source record: 90898

On Mon, 16 Aug 2004 02:09:49 GMT, Jim - NN7K
<nn7kexk7zfg@sbcglobal.net> wrote:

>Perhaps was wrong on
>initial assumption that swr was bi-directional, but doesn't negate the
>original premise that the swr has no effect on recieve-- and, btw, will
>the stacking actually provide THAT 3dB?? (before, or after the added 3:1
>mismatch)?? Yours for comment?? Jim NN7K

Hi Jim,

My experience in the very short wavelengths is confined to RADAR. I have not pursued satellite nor EME. RADAR comes with its own compensations in that if you have one, you can afford to do it right the first time (I pine for the day when the FCC allows Amateur RADAR operation).

As for Transmit/Receive, they are so intimately wed, that it is sometimes difficult to separate them and judge their needs on their own merits. A Receiver doesn't need to have an input Z of 50 Ohms, but given that the Receiver of a Transceiver shares the same path ways of the transmitter, it is foolish to go a different direction. Why would you put a 300 Ohm first RF stage after a filter designed for 50 Ohms? A 6:1 SWR from the get-go is simply stupid when you can do it right with so little effort.

I've seen some discussion that it doesn't matter because front ends only take voltage and need no current. This is a 0Hz analysis and at 10MHz is thoroughly dead in the water. Stray capacitance negates any claims to an input being Hi-Z and the whole point of low Z inputs is to swamp nature's capacity to send your signal straight to ground before it sees that amplifier.

For the mild SWRs such as described by Jerry, most receivers have a lot of head room (capacity) to amplify what makes its way in. The only down-side is degrading S+N/N ratio for very small signals where this capacity fails to make up for information loss.

73's
Richard Clark, KB7QHC

1879. Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:11:54 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408161011.452626ee@posting.google.com>
Source record: 90899

I have a low-power 4:1 toroid balun almost ready in a little plastic box. In order to keep the rain out, I am sealing everything up, but I am also considering space-filling materials.

I am leaning toward filling it with hot "wax" - actually, paraffin from standard household candles, although a harder grade like sometimes found in old military equipment should be better.

The pro should be that the box would not become sealed for eternity in case I want to re-wire something in the future, while epoxy is bomb proof, and urethane foam is also rather hard to remove.

Is there any electrical con to be considered?

1880. Re: What is RF current?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:34:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6pu1i05dhu7mra6f2cticulcb9bb2nqm3u@4ax.com>
Source record: 90900

On 16 Aug 2004 09:08:46 -0700, krt2054@charter.net (Thomas) wrote:

Hi Thomas,

The statement that:
>6. The current that "flows" in a dielectric, otherwise known as
>displacement current,
contradicts:
>What RF current is NOT is the transverse electromagnetic wave. That
>is, once the effect is in the ether there is no RF current.

All alternating current seeks to escape out into the void of space. Frequency merely tailors how effectively this is accomplished. Current arises through the movement of charge (fairly built into a physical process). This movement can be quite far away (even to the point of the Butterfly effect) but still influence other physical charges to mimic the movement. Hence there is the appearance of continuity of the current even though there is no physical transport capable of conducting that physical charge across that space.

In any current, if you could isolate and observe a specific, physical charge; then you would observe that it travels no more than a meter a second (if that fast). However, if you could isolate and observe two specific, physical charges; then you could observe that when one moved, the other would mimic that movement with nearly no delay and the effect of that continuity is only limited by the speed of light and the distance between those charges.

73's
Richard Clark, KB7QHC

1881. Re: Side by Side dipoles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:35:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i1vjce6fve768@corp.supernews.com>
Source record: 90901

Loss won't be a problem. The effects of coupling will be a change in the feedpoint impedance of the driven antenna, and a change in the radiation pattern. Because the coupling between collinear elements is relatively weak, all you're likely to notice is that the higher frequency antenna might require a little adjustment from its calculated length in order to achieve resonance.

Roy Lewallen, W7EL

N4IXT wrote:

> Thanks for all the replies!
>
> It sounds as though if I keep "short_rope" over one wavelength in length
> (which I can do), that would do the best job of minimizing loss.

1882. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:42:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i200e956mj7fc@corp.supernews.com>
Source record: 90902

There's a fundamental problem in making a scale model of an antenna to determine loss -- the wire conductivity has to be scaled with frequency. Of course, the wire diameter can be changed from the normally scaled size in order to create the same loss, but then the antenna might behave differently.

It's not clear to me how you could get quantitative data from measurements in a styrofoam container. Let's say you put 100 watts into the antenna for five minutes and the temperature rise (of the coil? helical winding? air?) was 10 degrees C. How would you calculate the loss or efficiency from that information?

Roy Lewallen, W7EL

Jerry Martes wrote:
>
> Youve gotten too refined. I mostly know about basic antenna theory and
> modeling. But building a VHF model of a 40 meter antenna with #12 copper
> wire wound around a 4 inch mandril might be impractical.
> But, if the "wonder antenna" is small enough to be enclosed (mostly) in
> something transparent to the RF but not to the thermal thats generated by
> any I^2* R losses, wouldnt the temperture rise inside the enclosure give a
> decent indication of efficiency?
>
> If this "wonder antenna" designer claims to be able to shape the radiation
> pattern with an antenna significantly shorter that a 1/4 wave stub, He
> really has something. I suspect that the something he has is mental
> illness.
>
> I've been following this info on the RI antenna and have considered it to
> be so 'snake oilish' that it would never see the light of an auditorium.
>
> Your post about attending the lecture made me wonder if anyone asked about
> *any* simple (approximations) measurements like the styrofoam radome to get
> some idea of the I^2*R power lost in the antenna. If he has an antenna, and
> a transmitter and enough room to build a foam igloo it seems that alot of
> data on efficiency could be obtained.
> If I had any interest in describing an antenna I'd built, I'd at least use
> an infared thermometer on the section of the antenna suspected as being the
> most lossy.
>
> Jerry
>
>

1883. Re: What is RF current?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:50:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i20g6pnnlcnc3@corp.supernews.com>
Source record: 90905

Thomas wrote:

> Sorry for the dumb question, but I see the phrase "RF current" used in
> so many contexts that I am not sure what it is.
>
> What I "think" it is, is:
>
> 1. The sinusoidal, voltage / current that is impressed on the, e.g.,
> coax feedline's center conductor by the transmitter (a.k.a.,
> generator)

No, current is not "voltage/current". It's current. Voltage is something else. This comment applies to 2-5 also.

It also doesn't have to be sinusoidal.

> 2. The voltage / current on the conductive portion of the radiator
>
> 3. The sinusoidal, voltage / current that is picked up by the "other"
> conductive portion of the radiator (e.g., other pole of a dipole or
> the ground, radials or counterpoise system of a vertical antenna)

Now, the question is, how is that current "picked up"?

>
> 4. The sinusoidal, voltage / current that is returned to the
> transmitter via the shield of the coax.
>
> 5. The induced voltage / current in the counterpart of the receiving
> system.
>
> 6. The current that "flows" in a dielectric, otherwise known as
> displacement current, the original notion that allowed Maxwell to
> posit the existence of the ether.
>
> That is, RF current is no difference than "current" except for its
> frequency.

And the fact that it can "flow" through non-conductors as a "displacement current". This can make its behavior a lot different than zero-frequency current (DC).

>
> What RF current is NOT is the transverse electromagnetic wave. That
> is, once the effect is in the ether there is no RF current.

"Displacement current" IS an electromagnetic field. It's the mechanism which induces conductive current in one conductor as a result of conductive current in another. (This the answer to the question I asked after point 3.)

> Looking for confirmation or refutation of the specific points above.
>
> Thanks.
>
> Thomas

Roy Lewallen, W7EL

1884. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:50:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d602i0djgrsb67j3ugd82j5h5uqk18mii6@4ax.com>
Source record: 90904

On 16 Aug 2004 11:11:54 -0700, n1jpr@hotmail.com (SpamHog) wrote:

>I have a low-power 4:1 toroid balun almost ready in a little plastic
>box. In order to keep the rain out, ...
>
>Is there any electrical con to be considered?

Hi OM,

It increases the input to output capacity (reduces isolation).

Use the lid to keep the rain out. Invest your time in its seal.

If you want a hard, hard wax, visit a dental supplier, or a nearby
laboratory. They use very hard waxes for investment molds. Or they
used to....

73's
Richard Clark, KB7QHC

1885. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 18:58:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gg02i0hltafino2q94a3me42ps7rf09t24@4ax.com>
Source record: 90906

On Mon, 16 Aug 2004 18:05:41 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>verification of my assumption
>that extra radiation becomes available.

Hi Art,

Extra? From where? What is the source? If it is the same source,
then it is not Extra, but simply managed to fit a need. In this sense
you still have to balance the budget of what you got, and what you
radiate and what you lose (to heat). The budget does not allow
Extras. The budget does however allow you to transfer balances as
long as you maintain the same total. In this sense, it is like
stacking elements with the correct phase relationships to move
radiation that would have gone to the clouds, towards the horizon.
You are still radiating the same power, but the relationship change
has netted more of it going in a direction more suitable to your
needs.

Now, as to the matter of bends in the antenna doing this; then the
literature is rich in examples to this matter. The Franklin antenna
comes to mind. It has lots of bends specifically tailored to create
this budget shift. It has been around for 70 or 80 years?

73's
Richard Clark, KB7QHC

1886. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 19:01:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i214dp7rhlb03@corp.supernews.com>
Source record: 90907

aunwin@insightbb.com wrote:

> Gentlemen
> I have in the past alluded not only radiation from a straight element but
> also the ADDITION of radiation
> occuring from a bent element. Nobody has commented on the authentisity of
> this statement and I have not come acros anything in my own collection of
> books.
> Now my present antenna consists of various loops connected in both a
> clockwise and clockwise radiation form such that the circular polarisation
> cancells leaving pure vertical polarisation.. The loops are separatred in a
> way that intercapacity of the spiral loops is reduced as well as circular
> cancellation All of this is based on my gut feeling that R.F.current flowing
> around a circular radiating element. What I ask for for those who have a
> deeper background of R.F. is verification of my assumption
> that extra radiation becomes available.

It does not. If you apply 100 watts to an antenna, 100 watts is
available to radiate, less any amount dissipated as heat. This applies
to EVERY antenna, from a rubber duckie to a zillion-element Yagi with a
boom you can walk on. No bending, adding of elements, supergain, loops,
or magic will give you any "extra radiation" above that. All you can do
with all the possible tricks there are is to concentrate some of that
100 watts in some directions at the expense of others.

> Appreciate any comments on this irregular aproach as I cxannot find guidance
> in the books.
> A serious question regarding added radiation from an element in the hope
> that insight is provided even tho it may expose the fallacy of my aproach.

My statement above is based on the law of conservation of energy, which
it sounds like you're trying to violate. If you think it's possible,
you'd make a lot more money by putting your effort into developing a
perpetual motion machine.

> Thanks in advance
> Art

Roy Lewallen, W7EL

1887. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 19:31:45 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <BY7Uc.22263$SC1.7924@nwrddc03.gnilink.net>
Source record: 90908

Roy

I'm a real slopy builder. So, I do alot of half-assed things. I might begin with a 100 watt light bulb inside the "icebox" to establish a referance temperature. maybe even a 50 watt and even a 25 watt. And, if the antenna could be modeled at some frequency where I could build an ice box thats sufficiently transparent to RF, like 6 Meters, I'd build a full size antenna for use as a referance.

I've never done something like this. It just sems very practical, since a 100% efficient antenna wouldnt introduce any heat. But , a 50% efficient one might produce about the same heat as a 50 watt light bulb.

I'd not declare this "ice box" to be a Lab Standard. But, if there was need, I'd sure try to evaluate the concept.

When people like you cast doubt on anything I tink up, I begin to doubt myself.

Jerry

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10i200e956mj7fc@corp.supernews.com...
> There's a fundamental problem in making a scale model of an antenna to
> determine loss -- the wire conductivity has to be scaled with frequency.
> Of course, the wire diameter can be changed from the normally scaled
> size in order to create the same loss, but then the antenna might behave
> differently.
>
> It's not clear to me how you could get quantitative data from
> measurements in a styrofoam container. Let's say you put 100 watts into
> the antenna for five minutes and the temperature rise (of the coil?
> helical winding? air?) was 10 degrees C. How would you calculate the
> loss or efficiency from that information?
>
> Roy Lewallen, W7EL
>
> Jerry Martes wrote:
> >
> > Youve gotten too refined. I mostly know about basic antenna theory
and
> > modeling. But building a VHF model of a 40 meter antenna with #12
copper
> > wire wound around a 4 inch mandril might be impractical.
> > But, if the "wonder antenna" is small enough to be enclosed (mostly)
in

> > something transparent to the RF but not to the thermal thats generated
by
> > any I^2* R losses, wouldnt the temperture rise inside the enclosure give
a
> > decent indication of efficiency?
> >
> > If this "wonder antenna" designer claims to be able to shape the
radiation
> > pattern with an antenna significantly shorter that a 1/4 wave stub, He
> > really has something. I suspect that the something he has is mental
> > illness.
> >
> > I've been following this info on the RI antenna and have considered it
to
> > be so 'snake oilish' that it would never see the light of an auditorium.
> >
> > Your post about attending the lecture made me wonder if anyone asked
about
> > *any* simple (approximations) measurements like the styrofoam radome to
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> > some idea of the I^2*R power lost in the antenna. If he has an antenna,
and
> > a transmitter and enough room to build a foam igloo it seems that alot
of
> > data on efficiency could be obtained.
> > If I had any interest in describing an antenna I'd built, I'd at least
use
> > an infared thermometer on the section of the antenna suspected as being
the
> > most lossy.
> >
> > Jerry
> >
> >

1888. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 20:20:55 UTC
From: "aunwin@insightbb.com"
Message-ID: <HG8Uc.264316$a24.176386@attbi_s03>
Source record: 90909

Points raised noticed and placed in my thoughts bag to digest.
With respect to radiation I revolve solidly about accedleratio during a point in time, accelleration required to negotiat a turn which even at constant speed create acceleration and lastly arangements that create more current without the loss of energy of which I see as coupling. Since I am pretty much self taught because of a loss of memory onslaught it is easy to build on sand without a true geoligists report which is not available when one works alone. Thus I am curious as to where exactly I have gone astray by not having a thorough education in R.F. workings. So if there is cycliic increases of radiation per unit length then I see the same unit length in spiral form introduces an addition vector of forces that I translate into radiation, I have a history of not being able to adequately explaining my thought so hopefully the above will assist in explaining my thought processes even tho they may seem totally rediculus to those edu8cated in the field of whom I ask for correction.
From how I see it I have not viotated any laws with this thinking but now is the time for me to put things in there proper place.and accepted without rancour.
Regards
Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10i214dp7rhlb03@corp.supernews.com...
> aunwin@insightbb.com wrote:
>
> > Gentlemen
> > I have in the past alluded not only radiation from a straight element
but
> > also the ADDITION of radiation
> > occuring from a bent element. Nobody has commented on the authentisity
of
> > this statement and I have not come acros anything in my own collection
of
> > books.
> > Now my present antenna consists of various loops connected in both a
> > clockwise and clockwise radiation form such that the circular
polarisation
> > cancells leaving pure vertical polarisation.. The loops are separatred
in a
> > way that intercapacity of the spiral loops is reduced as well as
circular
> > cancellation All of this is based on my gut feeling that R.F.current
flowing
> > around a circular radiating element. What I ask for for those who have a

> > deeper background of R.F. is verification of my assumption
> > that extra radiation becomes available.
>
> It does not. If you apply 100 watts to an antenna, 100 watts is
> available to radiate, less any amount dissipated as heat. This applies
> to EVERY antenna, from a rubber duckie to a zillion-element Yagi with a
> boom you can walk on. No bending, adding of elements, supergain, loops,
> or magic will give you any "extra radiation" above that. All you can do
> with all the possible tricks there are is to concentrate some of that
> 100 watts in some directions at the expense of others.
>
> > Appreciate any comments on this irregular aproach as I cxannot find
guidance
> > in the books.
> > A serious question regarding added radiation from an element in the hope
> > that insight is provided even tho it may expose the fallacy of my
aproach.
>
> My statement above is based on the law of conservation of energy, which
> it sounds like you're trying to violate. If you think it's possible,
> you'd make a lot more money by putting your effort into developing a
> perpetual motion machine.
>
> > Thanks in advance
> > Art
>
> Roy Lewallen, W7EL

1889. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 20:31:03 UTC
From: "aunwin@insightbb.com"
Message-ID: <bQ8Uc.21537$mD.10831@attbi_s02>
Source record: 90910

Yes Richard the literature does abound with bent antennas, even yagis to
obtain a particular performance.
I know that there are "curls" in fields and waves analysis
but I view travering a circle at a constantspeed as generation of a force
vector as in centrifugal force which I probably falsly have placed in the
radiation category.
If I am incorrect I need to understand why so that I can rebuild my thought
processes. Modelling the antenna
shows insights that i had not realised before causing me to make an actual
antenna for follow up.
Regards
Art
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:gg02i0hltafino2q94a3me42ps7rf09t24@4ax.com...
> On Mon, 16 Aug 2004 18:05:41 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> >verification of my assumption
> >that extra radiation becomes available.
>
> Hi Art,
>
> Extra? From where? What is the source? If it is the same source,
> then it is not Extra, but simply managed to fit a need. In this sense
> you still have to balance the budget of what you got, and what you
> radiate and what you lose (to heat). The budget does not allow
> Extras. The budget does however allow you to transfer balances as
> long as you maintain the same total. In this sense, it is like
> stacking elements with the correct phase relationships to move
> radiation that would have gone to the clouds, towards the horizon.
> You are still radiating the same power, but the relationship change
> has netted more of it going in a direction more suitable to your
> needs.
>
> Now, as to the matter of bends in the antenna doing this; then the
> literature is rich in examples to this matter. The Franklin antenna
> comes to mind. It has lots of bends specifically tailored to create
> this budget shift. It has been around for 70 or 80 years?
>
> 73's
> Richard Clark, KB7QHC

1890. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 20:51:07 UTC
From: Old Ed <eXseniorsDeleteThisAndTheX@earthlink.net>
Message-ID: <%69Uc.24186$9Y6.12157@newsread1.news.pas.earthlink.net>
Source record: 90911

Hi Dick -

Thanks for passing along this very bad news. It is sad to lose
a fine OM like Bill, under any circumstances.

But all of us with an interest in wire antennas will be markedly
poorer because of this. IMHO, Bill's antennas were not merely
the best on the market; they were more numerous and better than
than all the competitors that I know of, COMBINED!

So this is a big, big hit for those who enjoyed the convenience
of buying turn-key, well-engineered, multi-band wire antennas.

I'm very glad I have my two W9INN multi-band dipoles--but
I'm very sorry I won't be able to replace them, or add to the "farm."

RIP, Bill. Thanks so much for increasing my enjoyment of the hobby.

73, Ed W6LOL

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
news:aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com...
> The following QST from ARRL makes me sad. I recall working Bill, W9INN,
> on CW in the early days with my WT7AAN call and was thrilled to say I
> was using a W9INN 40/80 dipole. His antenna is still in use at my QTH
> with additional legs added for other bands. Bill was an asset to our
> hobby and will be missed. I learned a lot about antennas from his
> detailed instructions provided with each antenna and will always
> remember the smallest ad in QST from W9INN.
>
> Dick, AA5VU
>
> ------ Forwarded Message
> From: "ARRL Letter Mailing List" <letter-dlvy@arrl.org>
> Date: Fri, 13 Aug 2004 16:20:38 -0400
> Subject: The ARRL Letter, Vol 23, No 32
>
> * William Fanckboner, W9INN, SK: William E. "Bill" Fanckboner, W9INN, of
> Mt Prospect, Illinois--the proprietor of W9INN Antennas--died July 30. He
> was 80. W9INN Antennas will die with him. "He did all of the work by
> himself, so it is effectively out of business," said his daughter, Robin
> Randall. "He was the business." Refunds will be mailed to those with
> existing orders
>
> other text cut
>

> ------ End of Forwarded Message

1891. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 20:59:26 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040816165926.12159.00003561@mb-m01.aol.com>
Source record: 90912

> But, if the "wonder antenna" is small enough to be enclosed (mostly) in
>something transparent to the RF but not to the thermal thats generated by
>any I^2* R losses, wouldnt the temperture rise inside the enclosure give a
>decent indication of efficiency?

No need for that really, too cumbersome. If you measure R you can calculate losses due to dissipation in heat.

Again, real comparison of efficiency of shortened antenna is to compare against the same pattern producing full (electrical) length antenna, everything is included in what you would measure. Much simpler too. I can build quarter wave vertical faster than styrofoam igloo. :-)

Basic rules are, best inductive loading is about 2/3 up the radiator, coil is better than loading stub, top hat is the best. Anything else is jocker's attempt at perpetuum mobile.

Yuri

1892. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 21:09:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i28k1khcbkmbe@corp.supernews.com>
Source record: 90913

Jerry Martes wrote:

> Roy
>
> I'm a real slopy builder. So, I do alot of half-assed things. I might
> begin with a 100 watt light bulb inside the "icebox" to establish a
> referance temperature. maybe even a 50 watt and even a 25 watt. And, if
> the antenna could be modeled at some frequency where I could build an ice
> box thats sufficiently transparent to RF, like 6 Meters, I'd build a full
> size antenna for use as a referance.
>
> I've never done something like this. It just sems very practical, since a
> 100% efficient antenna wouldnt introduce any heat. But , a 50% efficient
> one might produce about the same heat as a 50 watt light bulb.

It would if the thermal mass of the antenna were the same as the light bulb, and if the thermal loss through the wiring were the same for the antenna as for the light bulb. But otherwise, they could be vastly different.

> I'd not declare this "ice box" to be a Lab Standard. But, if there was
> need, I'd sure try to evaluate the concept.
>
> When people like you cast doubt on anything I tink up, I begin to doubt
> myself.
>
> Jerry

Well, then I've done a good service. Only when you have doubts about your methodolgy will you have any incentive to take the time to try and understand what you're doing.

Any conclusions you reach about the antenna's efficiency (except that it's not 100% efficient - duh) will be completely worthless unless you get at least some kind of handle on the relationship between the heat and the temperature.

Roy Lewallen, W7EL

1893. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 21:14:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i28tdbfrm3g64@corp.supernews.com>
Source record: 90914

The law of conservation of energy is a touchstone you should always use as a reality check for whatever theory you have. If your theory leads to a conclusion that contradicts that law, then either your theory is wrong or there was an error in some step along the way from the theory to the conclusion.

Or you belong to the perpetual motion machine crowd.

Roy Lewallen, W7EL

aunwin@insightbb.com wrote:

> Points raised noticed and placed in my thoughts bag to digest.
> With respect to radiation I revolve solidly about accedleratio during a
> point in time, accelleration required to negotiat a turn which even at
> constant speed create acceleration and lastly arangements that create more
> current without the loss of energy of which I see as coupling. Since I am
> pretty much self taught because of a loss of memory onslaught it is easy to
> build on sand without a true geoligists report which is not available when
> one works alone. Thus I am curious as to where exactly I have gone astray by
> not having a thorough education in R.F. workings. So if there is cycliic
> increases of radiation per unit length then I see the same unit length in
> spiral form introduces an addition vector of forces that I translate into
> radiation, I have a history of not being able to adequately explaining my
> thought so hopefully the above will assist in explaining my thought
> processes even tho they may seem totally rediculus to those edu8cated in the
> field of whom I ask for correction.
> From how I see it I have not viotated any laws with this thinking but now is
> the time for me to put things in there proper place.and accepted without
> rancour.
> Regards
> Art
>

1894. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 21:26:58 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <CE9Uc.22304$Yf6.18997@lakeread03>
Source record: 90915
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

"Doug" <dgbirky@voyager.net> wrote in message
news:e0206938.0408160918.45f1af29@posting.google.com...
> KC1DI <elbc2@gwi.net> wrote in message
news:<DtidnXoSAYDsSYLcRVn-rQ@gwi.net>...
> > Doug Birky wrote:
> > > I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm
running
> > > RG-8 to the balun. The dipole will be attached at 20' and the other
end will
> > > be about 40'. My question is can the coax be tie-straped to the short
end
> > > of the dipole antenna wire and run back with it toward the houes?
This is
> > > basically to keep a big loop from hanging down and also keeping the
wife
> > > happy since it would look much cleaner. I didn't know if this would
have a
> > > large impact on operation or not.
> > >
> > > 73
> > > Doug / KC8YEC
> > >
> > >
> > Hi Doug,
> >
> > I'm Running the Windom (OFCD) it identical to what your saying. but
> > you'll find that the coax needs to come off the antenna in pretty much a
> > 90 degree angle. ohterwise you will end up with lots of fedline
> > radiation which will cause problems in the shack.
> > 73 Dave kc1di
>
> Can you give me an indication about how long a lead I need before
> running the coax back toward the house and into the radio? I'm going
> to run the coax up the house and out to the feedpoint.
>
> Doug

90 degrees under the antenna, not perpendicular at it's elevation. Get as
far away as possible, burying the feedline so your earlier dilemma will not
be worsened ;-)

I know my wife just _loves_ seeing that feedline "drop out of the sky" in
the middle of the lawn. But that's the way the antenna is designed. Suggest
you try that, determine it's efficiency by whatever means you can, then try

running it straight over to the house. I think we all agree it will lose some output power back onto the feedline, but you could handle the safety issue there, or try, with some RadioWorks line isolator products.

Jack

1895. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 21:56:56 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cfranp$c5f$1@newshost.mot.com>
Source record: 90919

A nice guy and I'm glad I had a chance to pick his brain about Jim Ricks,
W9TO.
Thanks for contributing, Bill...
--
Steve N, K,9;d, c. i My email has no u's.

"Old Ed" <eXseniorsDeleteThisAndTheX@earthlink.net> wrote in message
news:%69Uc.24186$9Y6.12157@newsread1.news.pas.earthlink.net...
> Hi Dick -
>
> Thanks for passing along this very bad news. It is sad to lose
> a fine OM like Bill, under any circumstances.
>
> But all of us with an interest in wire antennas will be markedly
> poorer because of this. IMHO, Bill's antennas were not merely
> the best on the market; they were more numerous and better than
> than all the competitors that I know of, COMBINED!
>
> So this is a big, big hit for those who enjoyed the convenience
> of buying turn-key, well-engineered, multi-band wire antennas.
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> I'm very sorry I won't be able to replace them, or add to the "farm."
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> RIP, Bill. Thanks so much for increasing my enjoyment of the hobby.
>
> 73, Ed W6LOL
>
>
> "Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
> news:aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com...
> > The following QST from ARRL makes me sad. I recall working Bill, W9INN,
> > on CW in the early days with my WT7AAN call and was thrilled to say I
> > was using a W9INN 40/80 dipole. His antenna is still in use at my QTH
> > with additional legs added for other bands. Bill was an asset to our
> > hobby and will be missed. I learned a lot about antennas from his
> > detailed instructions provided with each antenna and will always
> > remember the smallest ad in QST from W9INN.
> >
> > Dick, AA5VU
> >
> > ------ Forwarded Message
> > From: "ARRL Letter Mailing List" <letter-dlvy@arrl.org>
> > Date: Fri, 13 Aug 2004 16:20:38 -0400

> > Subject: The ARRL Letter, Vol 23, No 32
> >
> > * William Fanckboner, W9INN, SK: William E. "Bill" Fanckboner, W9INN, of
> > Mt Prospect, Illinois--the proprietor of W9INN Antennas--died July 30.
He
> > was 80. W9INN Antennas will die with him. "He did all of the work by
> > himself, so it is effectively out of business," said his daughter, Robin
> > Randall. "He was the business." Refunds will be mailed to those with
> > existing orders
> >
> > other text cut
> >
> > ------ End of Forwarded Message
>
>
>

1896. Re: chain link fence

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:06:19 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cfrb9c$c9e$1@newshost.mot.com>
Source record: 90822

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:Sno4kjPznOIBFAPQ@ifwtech.co.uk...
> Wedgew wrote:
> >my back yard is fenced(102 ft by 35 ft. chain link woith dug in posts
> >every 7 or 8 ft
> >could this be used as a counterpoise or as a ground?
>
> Top Band enthusiasts often bond everything imaginable to their ground
> system, so why not try it.

I'd be very worried with all those poor connections at every link point.
Could be (could) be a really good noise source. It seems that any movement
would cause changes in the current path creating noise on the Rx AND _your_
Tx signal. I fought similar problems on mobile phone installations. The
Appollo pick up ships had similar problems from the chain deck railing
parts. Good luck.

> >OK!
> >What GeNiuS pUt thE CaPlocK KEy
> >RiGhT NeXt to The Shft KEY?

BUBut it _ain't_ a Caps LOCK key anymore, it's a CAPS INVERT key,
right? Nice idea, Ian, FOAM...

--
Steve N, K,9;d, c. i My email has no u's.

>
> The same genius who put the function keys along the top of the keyboard,
> just out of reach when you're t7ping.

Is that not t7p8ng ?

>
> If the Caps Lock key bugs you as much as it bugs me, put some stiff foam
> under the key-cap, so it won't go down unless you really mean it.
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

1897. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:06:43 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <P84Pi3Tz$SIBFANz@ifwtech.co.uk>
Source record: 90916

Richard Clark wrote:
>I've seen some discussion that it doesn't matter because front ends
>only take voltage and need no current. This is a 0Hz analysis and at
>10MHz is thoroughly dead in the water.

Once again, what I said has been thoroughly misquoted.

> Stray capacitance negates any claims to an input being Hi-Z and the
>whole point of low Z inputs is to swamp nature's capacity to send your
>signal straight to ground before it sees that amplifier.

Now that analysis really *is* dead in the water!

My simplification to "the amplifier takes what it needs from a 50-ohm source" is just that - a simplification. But it is based on actually knowing something about the subject. If you wish to discuss input network design for FET RF stages in terms of Smith-chart circles of constant gain and noise figure, and the device manufacturer's quoted data for gamma-opt, then I'm willing and able.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1898. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:11:24 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <bM3KeIVMETIBFA8x@ifwtech.co.uk>
Source record: 90920

aunwin@insightbb.com wrote:
> With respect to radiation I revolve solidly about accedleratio during
>a point in time, accelleration required to negotiat a turn which even
>at constant speed create acceleration

You really *are* related to Stanley Unwin, aren't you?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1899. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:20:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <oe08h0hmqhqob6cgmtr949vo348fir9hh5@4ax.com>
Source record: 90917

On Mon, 16 Aug 2004 20:31:03 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>If I am incorrect I need to understand why

Hi Art,

Because "Extra" in the budget does not balance.

If you get more power OUT because it is going in a circle, then you
FIRST have to put more power IN to get into that same circle. There
is no extra left.

73's
Richard Clark, KB7QHC

1900. Re: PHASING HARNESS FOR 2 BAY CIRCULAR POLARIZED ANTENNA?????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:26:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r418h0d83e2ull38bcioqnql3igv06svuk@4ax.com>
Source record: 90918

On Mon, 16 Aug 2004 23:06:43 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>Richard Clark wrote:
>>I've seen some discussion that it doesn't matter because front ends
>>only take voltage and need no current. This is a 0Hz analysis and at
>>10MHz is thoroughly dead in the water.
>
>Once again, what I said has been thoroughly misquoted.

Hi Ian,

If it was you that said it, otherwise you are misquoting me.

>My simplification to "the amplifier takes what it needs from a 50-ohm
>source" is just that - a simplification.

Ah yes, you are misquoting me.

73's
Richard Clark, KB7QHC

1901. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:37:49 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ocr9nF8sje0U1@uni-berlin.de>
Source record: 90821

"Tam/WB2TT" wrote re WABC night time reception in PA:
> Richard, I think he is just too close for night time sky wave,
> and too far for ground wave.

Quoting the original post, "I live approx 80 miles from the xmitter of station WABC (New York) 50,000 watts. During the day my reception is good-to-very good. After sunset however, the signal is poor to unlistenable -- due to fading and man-made QRM."

WABC radiates the same power from the same radiator 24 hours a day, and provides good daytime reception at this receive location, so it is not too far for the groundwave.

The ground wave is more or less constant day and night, so it is likely that the poor/unlistenable signal there at night must be the result of interference to the groundwave from whatever high-angle skywave WABC produces, plus the higher co- and adjacent-channel interference usually present at night.

RF

1902. Random length wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 22:55:10 UTC
From: whru@msn.com
Message-ID: <e52bdeaf.0408161455.1767680b@posting.google.com>
Source record: 90823

Gentlemen,
I installed a 140 ft wire in hopes to match it on all HF bands. It plays nicely through my ATU. I would like to modify this setup by using about 20 ft.of coax inside the house (for a better look). Is there a known matching scheme to accomodate the wire to the coax? What other problems might I encounter?
Thanks for any help
73
wb6iiq
Fred

1903. BCB DX Web site ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:02:02 UTC
From: Dave Pitzer <dpitzer@sonic.net>
Message-ID: <K1bUc.7953$54.119438@typhoon.sonic.net>
Source record: 90824

I recall that there is an organization devoted to commercial Broadcast-Band DXing. Can anyone supply me with the Web address??

Thanks in advance,

Dave Pitzer
Pocono Lake, PA
.

1904. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:14:00 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <YcbUc.8414$Kf4.6203@nwrddc02.gnilink.net>
Source record: 90825

Yuri

I sure disagree about being able to determine an antenna's efficiency by either resistance measurements or by measuring received signa;l strength at any one point in space. But, you are certainly a much smarter fuy than I ever was. So, I am not equipped to get into a news group contest.
It is my contention that the antenna under test's complete radiation pattern and field strength would have to be measured and integrated if field strength is used to determine it's efficiency. That could get coplicated.
It would have seemed to me that the loss in any "R" is dependent on the current flowing in it. And, I'd be concerned that any resonances could have higher circulating currents at the operating frequency.

If you can point out the errors in my convictions, I'd like to read about where I'm wrong.

Jerry

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message news:20040816165926.12159.00003561@mb-m01.aol.com...
> > But, if the "wonder antenna" is small enough to be enclosed (mostly) in
> >something transparent to the RF but not to the thermal thats generated by
> >any I^2* R losses, wouldnt the temperture rise inside the enclosure give a
> >decent indication of efficiency?
>
>
>
> No need for that really, too cumbersome. If you measure R you can calculate
> losses due to dissipation in heat.
>
> Again, real comparison of efficiency of shortened antenna is to compare against
> the same pattern producing full (electrical) length antenna, everything is
> included in what you would measure. Much simpler too. I can build quarter wave
> vertical faster than styrofoam igloo. :-)
>
> Basic rules are, best inductive loading is about 2/3 up the radiator, coil is
> better than loading stub, top hat is the best. Anything else is jocker's
> attempt at perpetuum mobile.
>

> Yuri

1905. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:19:56 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cfrfes$j7u$1@hercules.btinternet.com>
Source record: 90826

The most intelligent, sensible and successful radio engineers make no attempt to measure antenna radiating efficiency. It never occurs to them to do so - they invariably calculate it.

It takes no longer than a couple of minutes on the back of a used envelope, using a pocket calculator. It is more accurate and is absolutely certain to be enormously less expensive.

But perhaps some old wife who cannot do simple arithmetic will find a fellow creature somewhere in Google who is reported as having attempted to measure it.

The real problem lies in the western world's educational system. Arithmetic has been neglected for far too long. It will take two generations to return to normal and dis-arm children who take loaded guns, even automatic weapons, to school. Never mind about tower blocks. As a priority, teachers must be protected from acts of terrorism.

But too late. Chinese and other Eastern countries' education, science, engineering and technology will have already acheived supremacy.

But why make a battle out of it? I'm sure the peaceful, generous, Chinese will be quite willing to share the products of their educational system.

Reg, G4FGQ

1906. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:25:20 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <AnbUc.23360$SC1.1495@nwrddc03.gnilink.net>
Source record: 90827

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10i28k1khcbkmbe@corp.supernews.com...
> Jerry Martes wrote:
>
> > Roy
> >
> > I'm a real slopy builder. So, I do alot of half-assed things. I
might
> > begin with a 100 watt light bulb inside the "icebox" to establish a
> > reference temperature. maybe even a 50 watt and even a 25 watt. And,
if
> > the antenna could be modeled at some frequency where I could build an
ice
> > box thats sufficiently transparent to RF, like 6 Meters, I'd build a
full
> > size antenna for use as a reference.
> >
> > I've never done something like this. It just sems very practical,
since a
> > 100% efficient antenna wouldnt introduce any heat. But , a 50%
efficient
> > one might produce about the same heat as a 50 watt light bulb.
>
> It would if the thermal mass of the antenna were the same as the light
> bulb, and if the thermal loss through the wiring were the same for the
> antenna as for the light bulb. But otherwise, they could be vastly
> different.
> >
> > I'd not declare this "ice box" to be a Lab Standard. But, if there
was
> > need, I'd sure try to evaluate the concept.
> >
> > When people like you cast doubt on anything I tink up, I begin to
doubt
> > myself.
> >
> > Jerry
>
> Well, then I've done a good service. Only when you have doubts about
> your methodolgy will you have any incentive to take the time to try and
> understand what you're doing.
>
> Any conclusions you reach about the antenna's efficiency (except that
> it's not 100% efficient - duh) will be completely worthless unless you

> get at least some kind of handle on the relationship between the heat
> and the temperature.
>
> Roy Lewallen, W7EL

Roy

Since I consider antenna efficiency difficult to measure accurately, I'd
be willing to try to measure it as carefully as *practical*. If that
required that the referance heater had a similar "thermal mass" to that of
the antenna under test, I could probably make a heater that did have a
thermal mass equivalent to that of the antenna.
But, I would propose that there is no easier way to actually measure an
antenna's efficiency than to measure the amount of power it turns into heat.
Thats a statement I cant back up, and I know it.

What is a better way to measure an antenna's efficiency??

1907. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:40:12 UTC
From: "aunwin@insightbb.com"
Message-ID: <wBbUc.306600$JR4.270531@attbi_s54>
Source record: 90828

Richard I need more explanation than that because power is somewhat
irrelevant.
Radiation in my mind (and I must be now worst off than I really thougt) is
accelleration and decelleration of current
which is certainly not power which in my mind is Isquared R. Thus if voltage
is increased current decreases
and therefore radiation decreases.(see effects of very close coupling of a
parallel circuit)
I really do not know where you are coming from, it seems so glib! This is
not meant in a demeaning way, I just
don't want to mix apples with oranges at this point in time. .
Current through a member travels at a constant speed but with cyclic
variations
in radiation. Travel in a circle is also at constant speed but with a
CONSTANT radiation per unit length.
Where exactly is the error in my logic? I suspect it has to do with relative
phase angles but I need it explained
in every day language
regards
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:oe08h0hmqhqob6cgmtr949vo348fir9hh5@4ax.com...
> On Mon, 16 Aug 2004 20:31:03 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> >If I am incorrect I need to understand why
>
> Hi Art,
>
> Because "Extra" in the budget does not balance.
>
> If you get more power OUT because it is going in a circle, then you
> FIRST have to put more power IN to get into that same circle. There
> is no extra left.
>
> 73's
> Richard Clark, KB7QHC

1908. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:43:39 UTC
From: "aunwin@insightbb.com"
Message-ID: <LEbUc.168955$eM2.23453@attbi_s51>
Source record: 90829

You mean in the way I cripple the english language?
I guess I could be
Regards
Art
"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:bM3KeIVMETIBFA8x@ifwtech.co.uk...
> aunwin@insightbb.com wrote:
> > With respect to radiation I revolve solidly about accedleratio during
> >a point in time, accelleration required to negotiat a turn which even
> >at constant speed create acceleration
>
> You really *are* related to Stanley Unwin, aren't you?
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

1909. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-16 23:57:13 UTC
From: "aunwin@insightbb.com"
Message-ID: <tRbUc.326399$XM6.126005@attbi_s53>
Source record: 90830

Roy if I have violated Newtons laws please inform me were I did that . I
admit you did not say that I did , but
surely you would not made a comment that was unrelated.....would
you ? I am only presenting a point of view, not to assure to all that I am
correct but to ascertain the error of that logic and certainly not to
advance the theory of perpetual motion even tho you may view me as an idiot
to ask such a silly question on this forum. If one is unsure even on the
most simple of things
then he is doomed to remain simple because he exposed his underbelly for
target practice.by asking for assistance

Art

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10i28tdbfrm3g64@corp.supernews.com...
> The law of conservation of energy is a touchstone you should always use
> as a reality check for whatever theory you have. If your theory leads to
> a conclusion that contradicts that law, then either your theory is wrong
> or there was an error in some step along the way from the theory to the
> conclusion.
>
> Or you belong to the perpetual motion machine crowd.
>
> Roy Lewallen, W7EL
>
> aunwin@insightbb.com wrote:
>
> > Points raised noticed and placed in my thoughts bag to digest.
> > With respect to radiation I revolve solidly about accedleratio during a
> > point in time, accelleration required to negotiat a turn which even at
> > constant speed create acceleration and lastly arangements that create
more
> > current without the loss of energy of which I see as coupling. Since I
am
> > pretty much self taught because of a loss of memory onslaught it is easy
to
> > build on sand without a true geoligists report which is not available
when
> > one works alone. Thus I am curious as to where exactly I have gone
astray by
> > not having a thorough education in R.F. workings. So if there is cycliic
> > increases of radiation per unit length then I see the same unit length
in
> > spiral form introduces an addition vector of forces that I translate
into

> > radiation, I have a history of not being able to adequately explaining
my
> > thought so hopefully the above will assist in explaining my thought
> > processes even tho they may seem totally rediculus to those edu8cated in
the
> > field of whom I ask for correction.
> > From how I see it I have not viotated any laws with this thinking but
now is
> > the time for me to put things in there proper place.and accepted without
> > rancour.
> > Regards
> > Art
> >

1910. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:11:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i2j9tit2v1s45@corp.supernews.com>
Source record: 90831

You can rest assured that you haven't violated the law of conservation of energy. Newton's laws aren't quite so absolute, so who knows, maybe you did bend one or another. You wouldn't be the first -- do a web search on "ultraviolet catastrophe".

Anyone should feel free to present a point of view. But if it contradicts the law of conservation of energy, it's wrong.

Roy Lewallen, W7EL

aunwin@insightbb.com wrote:
> Roy if I have violated Newtons laws please inform me were I did that . I
> admit you did not say that I did , but
> surely you would not made a comment that was unrelated.....would
> you ? I am only presenting a point of view, not to assure to all that I am
> correct but to ascertain the error of that logic and certainly not to
> advance the theory of perpetual motion even tho you may view me as an idiot
> to ask such a silly question on this forum. If one is unsure even on the
> most simple of things
> then he is doomed to remain simple because he exposed his underbelly for
> target practice.by asking for assistance
>
> Art

1911. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:12:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b24gh05h7ar3j2iqtlktt4gqh3c2ph12v9@4ax.com>
Source record: 90832

On Mon, 16 Aug 2004 23:40:12 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>Richard I need more explanation than that because power is somewhat
>irrelevant.

You then broach the remainder of your post in terms of acceleration -
which requires power, and deceleration which begats power.

There is no room for "extra" in the power budget.

>Radiation in my mind (and I must be now worst off than I really thougt) is
>accelleration and decelleration of current

I recognize this as a commonplace expression in this group (not unique
to you by any means). It is one of the most ill-conceived statements
ever to come down the pike and your conundrum (as for others) in
trying to retrofit it into a theory is part and parcel to its poor
analogy.

>I need it explained
>in every day language

Hi Art,

The plain, every day language of budgets is there. If you cannot
balance that simple ledger, then you have scant chance of
understanding the larger enigma.

73's
Richard Clark, KB7QHC

1912. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:23:10 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <zdcUc.8005$B53.2477@bignews6.bellsouth.net>
Source record: 90833

I used 3m 'Scotchkote' to coat the whole shebang - it waterproofs it ok
you can get it in the electrical section of Home Depot or Lowes, etc.
but both your suggestions sounds good - Silicone would be my chouce of the
2.
other things to try : 3M 'Scotchfil' (its like a rubber putty) then cover
with 3M 88 weatherproof tape.
and of course - we can't forget epoxy (but it will crack in time)

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0408161011.452626ee@posting.google.com...
> I have a low-power 4:1 toroid balun almost ready in a little plastic
> box. In order to keep the rain out, I am sealing everything up, but I
> am also considering space-filling materials.
>
> I am leaning toward filling it with hot "wax" - actually, paraffin
> from standard household candles, although a harder grade like
> sometimes found in old military equipment should be better.
>
> The pro should be that the box would not become sealed for eternity in
> case I want to re-wire something in the future, while epoxy is bomb
> proof, and urethane foam is also rather hard to remove.
>
> Is there any electrical con to be considered?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

1913. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:25:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i2k4cm7e41cb5@corp.supernews.com>
Source record: 90834

Jerry Martes wrote:
> Roy
>
> Since I consider antenna efficiency difficult to measure accurately, I'd
> be willing to try to measure it as carefully as *practical*. If that
> required that the referance heater had a similar "thermal mass" to that of
> the antenna under test, I could probably make a heater that did have a
> thermal mass equivalent to that of the antenna.
> But, I would propose that there is no easier way to actually measure an
> antenna's efficiency than to measure the amount of power it turns into heat.
> Thats a statement I cant back up, and I know it.
>
> What is a better way to measure an antenna's efficiency??
>

I believe it would usually be easier and more accurate to measure the amount of power it turns into radiation. That is, measure the strength of the radiated field compared with an antenna of known efficiency and preferably having a similar pattern.

Neither is easy, and a method that's "practical" from your point of view might well yield results which are so grossly inaccurate as to be useless. But go ahead, do a careful estimate of the accuracy you expect, do some measurements of various simple antennas whose loss is easy to calculate and compare the measured results, and see how well you can do. It's probably within the reach of a very careful amateur to make measurements which are accurate enough to be useful. It just isn't easy, and requires knowing the relationship between heat and temperature, where the heat is going, sources of error and the amount they can contribute, and a whole lot of care and attention to detail. And that's to get even crudely accurate results.

For myself, I'd model it as Reg suggests (although I'd use a program rather than the back of an envelope as he would) and easily believe that the model results are more accurate than any measurement I'd be able to make. However, neither calculation or measurement results are likely to alter the claims made by manufacturers of miracle antennas and their fans.

Roy Lewallen, W7EL

1914. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:35:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rr4gh05753k29dt3i7f2n7225b9d0ccg8k@4ax.com>
Source record: 90835

On Mon, 16 Aug 2004 23:25:20 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> What is a better way to measure an antenna's efficiency??

Hi Jerry,

I see you are suffering from answers out to three decimals again.

Your idea is not so far fetched, it is the simple calorimetric bomb.
With enough patience and references, yes, you could measure
inefficiency. However, the inefficiency could easily be lost in the
inaccuracy and patience is not a virtue where simpler methods prevail.

You rightly note that a total integration of all field strengths would
be required, and be far more cumbersome. This is the classic
treatment, but when done once with a reference for comparison, it is
unnecessary to apply to other antennas of simple characteristics.
Others note that simple comparisons serve quite suitably. For a small
antenna (that is, in relation to wavelength such as the DLM and others
like CFA/eh/fractals purport to operate efficiently in) there is no
hint that the radiation lobes are going to offer manifestly high gain
so as to drive comparisons off the chart. Certainly inventors make
such fantasy claims, and those claims characteristically remain
unsubstantiated. The DLM is a classic example.

Side by side comparisons of the DLM with known good antennas, or even
known poor ones with similar lobe patters could easily reveal
efficiency. I suppose these same inventors could crow about a razor
thin 24dB gain lobe pointed at the horizon (if you only knew the
tune-up procedures), but you are not going to find this from any
antenna packed into a box with less than quarterwave dimensions on all
sides. [readers: Examples proving this last sentence wrong are
welcome.]

73's
Richard Clark, KB7QHC

1915. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:38:42 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040816203842.23951.00003948@mb-m28.aol.com>
Source record: 90836

>
> I sure disagree about being able to determine an antenna's efficiency by
>either resistance measurements or by measuring received signa;l strength at
>any one point in space.

From practical, engineer's point of view, and we are looking at shortened (loaded) antennas, you (or at least I) want to know how efficient the loaded antenna is vs. equivalent (same pattern producing) antenna. You want to compare oranges with oranges. The ultimate indicator is how much is one better (worst) than the other producing more (less) transmit (or receive) signal. That is the ultimate parameter that we are looking for, that's what you want to measure and compare. We have dB as a unit for that. 3dB means you gain (lose) double (power) signal. If you lose 50% in the heat, you will see corresponding loss in signal strength. So forget the igloo!

>But, you are certainly a much smarter fuy than I
>ever was. So, I am not equipped to get into a news group contest.

How did you arrive at that without putting me in the styrofoam igloo, or that I am Fuy? :-)

> It is my contention that the antenna under test's complete radiation
>pattern and field strength would have to be measured and integrated if
>field strength is used to determine it's efficiency. That could get
>coplicated.

NOT! That's why you want to use the same pattern producing antennas for comparison (apples to apples) i.e. quarter wave (electrical) shortened (loaded) vertical vs. full size quarter wave vertical made of same material (tubing). You can make measurements at the same point (properly chosen) and compare signal levels while swapping the antennas at the same test site.

> It would have seemed to me that the loss in any "R" is dependent on the
>current flowing in it. And, I'd be concerned that any resonances could have
>higher circulating currents at the operating frequency.
>

Circulating in what?

> If you can point out the errors in my convictions, I'd like to read about
>where I'm wrong.
>

You can be "convicted" in anything you like. But you have to look at the problems and see what are you trying to achieve. I always try to make antenna to produce the maximum signal in the desired direction, pattern. That's what you try to measure, evaluate. Anything else is just contributing factor that

gets included in the final parameter - signal strength. You can fart with heat, resistances, etc., I do not use antennas for heating, I use them for producing or extracting signals and that's what I am interested in and want to quantify. You need proper "standard" and use proper parameters to compare your "miracle" against.

If Mr. Vincent "discovers" that his shortened antenna is more broadband than full size (same electrical length) radiator, than he has some serious resistors "broadening" the response. My dummy load is perfect broadband "antenna" and almost 100% "efficient" - turns almost 100% of power into a heat, but radiates almost nothing.

The point is, you can measure other things like heat generated by the loses, but you are neglecting other parameters that come to play, leading you astray, while neglecting the most important parameter - the result you are (or I am) after - the signal strength!
Does that "convict" you? Otherwise I rest my case.
> Jerry
>

Yuri, K3BU.us

1916. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:49:00 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <NBcUc.8084$B53.4377@bignews6.bellsouth.net>
Source record: 90837

Art,
An interesting proposition. Acceleration of a radio wave.
If this succeeds, then does this mean that the wave travels 'faster' than
other waves?
If that's true - and the wave does travels faster - then it follows that the
length of the propogated wave would be shorter.
If the length is shorter - then we would perceive it as a shift in
frequency - because we assume all RF travels at the same speed.
For instance - if the wave 'started off' 2 meters long - and was accelerated
to double the speed, then the wavelength would be only one meter long.
Our assumptions may be invalid.
We can only base our responses on what we have learned, but if this is new,
then it folllows that we have not learned it yet.
Let's hear more about your theory.

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:VH6Uc.324209$XM6.205186@attbi_s53...
> Gentlemen
> I have in the past alluded not only radiation from a straight element but
> also the ADDITION of radiation
> occuring from a bent element. Nobody has commented on the authentisity of
> this statement and I have not come acros anything in my own collection of
> books.
> Now my present antenna consists of various loops connected in both a
> clockwise and clockwise radiation form such that the circular polarisation
> cancells leaving pure vertical polarisation.. The loops are separatred in
a
> way that intercapacity of the spiral loops is reduced as well as circular
> cancellation All of this is based on my gut feeling that R.F.current
flowing
> around a circular radiating element. What I ask for for those who have a
> deeper background of R.F. is verification of my assumption
> that extra radiation becomes available.
> Appreciate any comments on this irregular aproach as I cxannot find
guidance
> in the books.
> A serious question regarding added radiation from an element in the hope
> that insight is provided even tho it may expose the fallacy of my aproach.
> Thanks in advance
> Art
>
>

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1917. Re: chain link fence

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:51:02 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <HDcUc.8092$B53.6365@bignews6.bellsouth.net>
Source record: 90839

I don't see anything wrong with it.

"Wedgew" <wedgew@rochester.rr.com> wrote in message
news:ko5Uc.151091$bp1.136983@twister.nyroc.rr.com...
> my back yard is fenced(102 ft by 35 ft. chain link woith dug in
> posts every 7 or 8 ft
> could this be used as a counterpoise or as a ground?
> --
> OK!
> What GeNiuS pUt thE CaPlocK KEy
> RiGhT NeXt to The Shft KEY?
>
>
> Seek not to confound me as I am dim-witted and slow of study.
>
> Wedge KC2MGJ
>

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1918. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:51:07 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <sK-dnS_Zk7jsy7zcRVn-ug@comcast.com>
Source record: 90838

"Richard Fry" <rfry@adams.net> wrote in message
news:2ocr9nF8sje0U1@uni-berlin.de...
> "Tam/WB2TT" wrote re WABC night time reception in PA:
> > Richard, I think he is just too close for night time sky wave,
> > and too far for ground wave.
> _________________
>
> Quoting the original post, "I live approx 80 miles from the xmitter of
> station WABC (New York) 50,000 watts. During the day my reception is
> good-to-very good. After sunset however, the signal is poor to
> unlistenable -- due to fading and man-made
> QRM."
>
> WABC radiates the same power from the same radiator 24 hours a day, and
> provides good daytime reception at this receive location, so it is not too
> far for the groundwave.
>
> The ground wave is more or less constant day and night, so it is likely
that
> the poor/unlistenable signal there at night must be the result of
> interference to the groundwave from whatever high-angle skywave WABC
> produces, plus the higher co- and adjacent-channel interference usually
> present at night.
>
> RF
>
Isn't there a zone where you tend to get cancellation between groundwave and
skywave?

Tam

1919. Re: AEA 10-30 ISOLOOP Antenna Parts

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 00:53:41 UTC
From: Dave <dgmfield@pacbell.net>
Message-ID: <pGcUc.4110$QJ3.1954@newssvr21.news.prodigy.com>
Source record: 90840

Thanks to all that replied. I was able to contact the firm below and they had the part for me:

AEA Technology

1489 Poinsettia Ave.

Suite 134

Vista, CA

92083

"Dave" <dgmfield@pacbell.net> wrote in message news:zwOSc.3023$QJ3.2151@newssvr21.news.prodigy.com...
> My ISO Loop antenna needs a new gear. It is the gear that attaches to the
> capacitor tuning part.
>
> Any ideas on where I might get a part? AEA is out of business.
>
>

1920. Re: Random length wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 01:03:19 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <cPcUc.8127$B53.7544@bignews6.bellsouth.net>
Source record: 90841

can you put an antenna analyzer on it?
If you can estimate the dominant impedance, you would have a better idea of how to match it up.
I would be tempted to wind a 4-to-one balun on a toroid and put it at the end of the coax to feed the wire - but I would be guessing.

"Fred" <whru@msn.com> wrote in message news:e52bdeaf.0408161455.1767680b@posting.google.com...
> Gentlemen,
> I installed a 140 ft wire in hopes to match it on all HF bands. It
> plays nicely through my ATU. I would like to modify this setup by
> using about 20 ft.of coax inside the house (for a better look). Is
> there a known matching scheme to accomodate the wire to the coax? What
> other problems might I encounter?
> Thanks for any help
> 73
> wb6iiq
> Fred

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1921. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 01:25:43 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <r8dUc.24337$SC1.8947@nwrddc03.gnilink.net>
Source record: 90842

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10i2k4cm7e41cb5@corp.supernews.com...
> Jerry Martes wrote:
> > Roy
> >
> > Since I consider antenna efficiency difficult to measure accurately,
I'd
> > be willing to try to measure it as carefully as *practical*. If that
> > required that the referance heater had a similar "thermal mass" to that
of
> > the antenna under test, I could probably make a heater that did have a
> > thermal mass equivalent to that of the antenna.
> > But, I would propose that there is no easier way to actually measure
an
> > antenna's efficiency than to measure the amount of power it turns into
heat.
> > Thats a statement I cant back up, and I know it.
> >
> > What is a better way to measure an antenna's efficiency??
> >
>
> I believe it would usually be easier and more accurate to measure the
> amount of power it turns into radiation. That is, measure the strength
> of the radiated field compared with an antenna of known efficiency and
> preferably having a similar pattern.
>
> Neither is easy, and a method that's "practical" from your point of view
> might well yield results which are so grossly inaccurate as to be
> useless. But go ahead, do a careful estimate of the accuracy you expect,
> do some measurements of various simple antennas whose loss is easy to
> calculate and compare the measured results, and see how well you can do.
> It's probably within the reach of a very careful amateur to make
> measurements which are accurate enough to be useful. It just isn't easy,
> and requires knowing the relationship between heat and temperature,
> where the heat is going, sources of error and the amount they can
> contribute, and a whole lot of care and attention to detail. And that's
> to get even crudely accurate results.
>
> For myself, I'd model it as Reg suggests (although I'd use a program
> rather than the back of an envelope as he would) and easily believe that
> the model results are more accurate than any measurement I'd be able to
> make. However, neither calculation or measurement results are likely to
> alter the claims made by manufacturers of miracle antennas and their fans.
>

> Roy Lewallen, W7EL

Roy

If I had your credentials, I'd measure antenna efficiency the way you prescribe.
It is only because I have no faith in my abiliuty to convince anyone what the pattern of a "New-Revolutionary is, that I'd get a thermometer out to chech my predictions that the antenna has *no* loss, like this guy does.

As I read this thread, there is one guy who thinks measuring the temperature of an antenna for getting information on its efficiency. And all the other posts consider that guy to be 'on the wrong path'. I'd advise doing it some way *other than* measuring heat of the antenna.

Jerry

1922. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 01:34:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i2o5tp3873205@corp.supernews.com>
Source record: 90843

Hal Rosser wrote:
> . . .
> If that's true - and the wave does travels faster - then it follows that the
> *length* of the propogated wave would be shorter.
> If the length is shorter - then we would perceive it as a shift in
> frequency - because we assume all RF travels at the same speed.
> For instance - if the wave 'started off' 2 meters long - and was accelerated
> to double the speed, then the wavelength would be only one meter long.
> . . .

You're too late -- the hyper-light-speed antenna has already been invented -- and patented. See U.S. patent #6,025,810. You'll have to do some splicing if the following link is broken by word wrap. Or it's easy to find at http://www.uspto.gov.

http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=/netahtml/srchnum.htm&r=1&f=G&l=50&s1=6025810.WKU.&OS=PN/6025810&RS=PN/6025810

Roy Lewallen, W7EL

1923. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 01:59:21 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <sDdUc.6014$3I1.5157@bignews5.bellsouth.net>
Source record: 90844

Roy,
the link worked as-is
I saw a TV special (I think it was on Nova) talking about 'string theory' -
that antenna invention mentions mutliple dimensions - and so does the string
theory-
But they (nova) hypothesize that we would need 'gravity waves' (not EM
waves) to communicate into another dimension.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10i2o5tp3873205@corp.supernews.com...
> You're too late -- the hyper-light-speed antenna has already been
> invented -- and patented. See U.S. patent #6,025,810. You'll have to do
> some splicing if the following link is broken by word wrap. Or it's easy
> to find at http://www.uspto.gov.
>
>
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=/netahtml/s
rchnum.htm&r=1&f=G&l=50&s1=6025810.WKU.&OS=PN/6025810&RS=PN/6025810
>
> Roy Lewallen, W7EL

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1924. Re: Random length wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 02:20:14 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <9dq2i0ptpnhalcfutk7fta82v9et7veo7c@4ax.com>
Source record: 90845

On 16 Aug 2004 15:55:10 -0700, whru@msn.com (Fred) wrote:

>Gentlemen,
>I installed a 140 ft wire in hopes to match it on all HF bands. It
>plays nicely through my ATU. I would like to modify this setup by
>using about 20 ft.of coax inside the house (for a better look). Is
>there a known matching scheme to accomodate the wire to the coax? What
>other problems might I encounter?
>Thanks for any help
>73
>wb6iiq
>Fred

I'm using roughly 140 feet of end-fed wire. Coax runs from the shack
out to underneath the near end of the wire, where I have a 4:1 balun.
One side of the balun goes to the wire, the other side goes to a ground
rod. TS-940S, IC-746PRO, and IC-703 all manage to match it on all HF
bands with no trouble. Coax length is not critical, but the balun
seems to help quite a bit.

--
-fb-

1925. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 02:25:14 UTC
From: funkbastler <funkbastler@eudoramail.com>
Message-ID: <5uq2i01njad5gsrgql93p6fngmdk3qvo07@4ax.com>
Source record: 90846

On Mon, 16 Aug 2004 18:50:58 GMT, Richard Clark <kb7qhc@comcast.net> wrote:
>
>If you want a hard, hard wax, visit a dental supplier, or a nearby
>laboratory. They use very hard waxes for investment molds. Or they
>used to....
>

Or maybe a production machine shop. They frequently use a nice hard
wax to proof CNC programs...

--
-fb-

1926. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 02:50:40 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <zneUc.6215$3I1.589@bignews5.bellsouth.net>
Source record: 90847

I would be very tempted to try a discone in this case - just to say I made
one.
practically no gain - but I hear they have extremely good bandwidth - and
different enough to start interesting QSOs locally

"Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
news:10huuo8a91fkn72@corp.supernews.com...
> Does anybody have any good ideas for a good dual band
> 2 meter/440 antenna? This would be a base antenna and
> should be capable of handling 200 watts.
>
>
> Thanks
>
>
> Chip

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1927. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 02:54:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412174cc_6@corp.newsgroups.com>
Source record: 90849

J. McLaughlin wrote:
> ... and I can remember when a coke went from a nickel to a dime. Tasted
> better then too. 73 Mac N8TT

Remember this jingle?

"Pepsi Cola hits the spot,
12 full ounces, that's a lot,
twice as much for a nickel, too,
Pepsi Cola is the drink for you."

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

1928. "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 02:57:57 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10i2t00qt43n480@corp.supernews.com>
Source record: 90848

Dear Group:
One may see a patent application for the "SteppIR" antenna on the
PTO's web site.

Look for:
20020171598 Tunable antenna system

Punch in the above number here:
http://appft1.uspto.gov/netahtml/PTO/srchnum.html

The application issued as patent 6,677,914.

I can not remember if this has been posted. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

1929. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 03:13:14 UTC
From: "aunwin@insightbb.com"
Message-ID: <dJeUc.269797$%_6.33856@attbi_s01>
Source record: 90850

Hi Hal, nice to meet you
What I have is not really a prposition or a legitimate theory, it is just something that apears to be in error but I do not understand why so I wanted something we had to e4xplain in exams which came from first principles. It was basic pricipals that I was looking for wether it be a comparison of area under a current curve per unit length compared to area when applied to a circle or even possibly a mathematical analusis. Roys says I am in error and should accept it because he said so. He is knoweledgable but just his word is not good enough.
Richard came in with his bag of tricks with the introduction of "power" which if nothing is stated he is off and running with an augument on the net. Ofcourse I did not fall for it, Soooooo I am reconciled to the fact that
there is not enough pertinent knoweledge out there that can allow reasonable discussion.
Still I find no discrace in asking the question even tho it may advertise my own lack of knoweledge.
Note you referenced speed per unit length in terms of frequency where as I was refering to a constant speed
where the energy input should have transpire3d into acceleration buyt instead added another vector that like a race care going round a circular circuit. This is going at constant speed all the time with the foot hard nown on the accelorator to counteract centrifugal forces evidenced by a spray of dirt that continues at a consistent rate and not in cyclic form if one accelerates on a straight runway.
In both cases we have constant speeds but we also have a difference in phases. Enough said. I have typed up the program to check things out again which has amounted to 400 wire segments plus the use of 20 variables to gauge the distances between each succesive coils so I can build the darn thing again from scratch and thus satisfy myself
on the why's and where fores rather than partaking in what will become a slanging thread that occurs in a somewhat regular fashion. If I am remiss on missing an actual true posting that discusses in detaILwhat I was
asking for then please draw my attention to it as I seemed somehow to have missed it
Very best regards
Art
,
"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:NBcUc.8084$B53.4377@bignews6.bellsouth.net...
> Art,
> An interesting proposition. Acceleration of a radio wave.
> If this succeeds, then does this mean that the wave travels 'faster' than
> other waves?

> If that's true - and the wave does travels faster - then it follows that
the
> *length* of the propogated wave would be shorter.
> If the length is shorter - then we would perceive it as a shift in
> frequency - because we assume all RF travels at the same speed.
> For instance - if the wave 'started off' 2 meters long - and was
accelerated
> to double the speed, then the wavelength would be only one meter long.
> Our assumptions may be invalid.
> We can only base our responses on what we have learned, but if this is
new,
> then it folllows that we have not learned it yet.
> Let's hear more about your theory.
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:VH6Uc.324209$XM6.205186@attbi_s53...
> > Gentlemen
> > I have in the past alluded not only radiation from a straight element
but
> > also the ADDITION of radiation
> > occuring from a bent element. Nobody has commented on the authentisity
of
> > this statement and I have not come acros anything in my own collection
of
> > books.
> > Now my present antenna consists of various loops connected in both a
> > clockwise and clockwise radiation form such that the circular
polarisation
> > cancells leaving pure vertical polarisation.. The loops are separatred
in
> a
> > way that intercapacity of the spiral loops is reduced as well as
circular
> > cancellation All of this is based on my gut feeling that R.F.current
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> > around a circular radiating element. What I ask for for those who have a
> > deeper background of R.F. is verification of my assumption
> > that extra radiation becomes available.
> > Appreciate any comments on this irregular aproach as I cxannot find
> guidance
> > in the books.
> > A serious question regarding added radiation from an element in the hope
> > that insight is provided even tho it may expose the fallacy of my
aproach.
> > Thanks in advance
> > Art
> >
> >
>

>
> ---
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>
>

1930. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 03:18:56 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <AOeUc.25052$SC1.14345@nwrddc03.gnilink.net>
Source record: 90851

Yuri

I realize you are a smart and important guy who knows alot about electronucs. But, when you enter in a thread at this time with statements about defining "3 DB" I wonder if you think everyone else is supid except you. Whats the point of defining "3DB??
I used to work with some very good engineers who happened to think measuring measuring antenna heating was a fairly decent way of getting "loss" data on an antenna. I happen to think it is a good way to get some preliminary info on antenna loss.
So, when you tell me to "forget the igloo", you seem to have placed yourself in a position where you think you know how to evaluate antenna efficiency and that I dont. I dont think you are *that* smart.

Jerry

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message news:20040816203842.23951.00003948@mb-m28.aol.com...
> >
> > I sure disagree about being able to determine an antenna's efficiency by
> >either resistance measurements or by measuring received signa;l strength at
> >any one point in space.
>
> From practical, engineer's point of view, and we are looking at shortened
> (loaded) antennas, you (or at least I) want to know how efficient the loaded
> antenna is vs. equivalent (same pattern producing) antenna. You want to compare
> oranges with oranges. The ultimate indicator is how much is one better (worst)
> than the other producing more (less) transmit (or receive) signal. That is the
> ultimate parameter that we are looking for, that's what you want to measure and
> compare. We have dB as a unit for that. 3dB means you gain (lose) double
> (power) signal. If you lose 50% in the heat, you will see corresponding loss in
> signal strength. So forget the igloo!
>
>
> >But, you are certainly a much smarter fuy than I
> >ever was. So, I am not equipped to get into a news group contest.
>

> How did you arrive at that without putting me in the styrofoam igloo, or
that I
> am Fuy? :-)
>
> > It is my contention that the antenna under test's complete radiation
> >pattern and field strength would have to be measured and integrated if
> >field strength is used to determine it's efficiency. That could get
> >coplicated.
>
> NOT! That's why you want to use the same pattern producing antennas for
> comparison (apples to apples) i.e. quarter wave (electrical) shortened
(loaded)
> vertical vs. full size quarter wave vertical made of same material
(tubing).
> You can make measurements at the same point (properly chosen) and compare
> signal levels while swapping the antennas at the same test site.
>
> > It would have seemed to me that the loss in any "R" is dependent on the
> >current flowing in it. And, I'd be concerned that any resonances could
have
> >higher circulating currents at the operating frequency.
> >
>
> Circulating in what?
>
> > If you can point out the errors in my convictions, I'd like to read
about
> >where I'm wrong.
> >
>
> You can be "convicted" in anything you like. But you have to look at the
> problems and see what are you trying to achieve. I always try to make
antenna
> to produce the maximum signal in the desired direction, pattern. That's
what
> you try to measure, evaluate. Anything else is just contributing factor
that
> gets included in the final parameter - signal strength. You can fart with
heat,
> resistances, etc., I do not use antennas for heating, I use them for
producing
> or extracting signals and that's what I am interested in and want to
quantify.
> You need proper "standard" and use proper parameters to compare your
"miracle"
> against.
>
> If Mr. Vincent "discovers" that his shortened antenna is more broadband
than
> full size (same electrical length) radiator, than he has some serious

resistors
> "broadening" the response. My dummy load is perfect broadband "antenna"
and
> almost 100% "efficient" - turns almost 100% of power into a heat, but
radiates
> almost nothing.
>
> The point is, you can measure other things like heat generated by the
loses,
> but you are neglecting other parameters that come to play, leading you
astray,
> while neglecting the most important parameter - the result you are (or I
am)
> after - the signal strength!
> Does that "convict" you? Otherwise I rest my case.
> > Jerry
> >
>
> Yuri, K3BU.us

1931. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 03:36:49 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41217ebc_6@corp.newsgroups.com>
Source record: 90853

aunwin@insightbb.com wrote:
> I suspect it has to do with relative phase angles but I need it explained
> in every day language

Art, a single RF traveling-wave wire has a natural Z0 in the
ballpark of 600 ohms which sets the V/I (E/H field) ratio.
The feedpoint current and the current at any point on a
standing-wave antenna is the phasor sum of the forward current
and the reflected current. Vf/If and Vr/Ir remain in the
ballpark of 600 ohms but Vf+Vr and If+Ir vary up and down
the wire. The current is high at a 1/2WL dipole feedpoint
because If and Ir are in phase at that point. The current is
low at a 1WL dipole feedpoint because If and Ir are out of
phase at that point. But If is approximately the same for
both antennas and Ir is approximately the same for both antennas.

That's why the superposed If+Ir at the bottom of a loading
coil is not usually equal to the superposed If+Ir at the
top of a loading coil. Each of the two currents indeed has
close to a constant magnitude through the coil but the phases
of If and Ir are changing in opposite directions. Thus their
sums are different except for the special case where the
relative phase difference is equal at both ends of the coil.

But for understanding RF radiation, If is fairly constant
and Ir is fairly constant, and each of those currents cause
radiation. Thinking about a terminated Rhombic Vs an unterminated
Rhombic will separate the two processes out in your mind.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1932. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 03:40:11 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41217f7d_6@corp.newsgroups.com>
Source record: 90854

Roy Lewallen wrote:
> Anyone should feel free to present a point of view. But if it
> contradicts the law of conservation of energy, it's wrong.

What about the assertion that net energy obeys the conservation
of energy principle but individual energy components do not
have to?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

1933. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 03:42:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3tggh01ol4ivlurnu014pl054hf5b6g2dc@4ax.com>
Source record: 90852

On Tue, 17 Aug 2004 03:13:14 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

> Soooooo I am reconciled to the fact
>that
>there is not enough pertinent knoweledge out there that can allow
>reasonable discussion.

In otherwords you are trolling.

1934. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 03:54:12 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <z9adnSkQ3dXHHLzcRVn-rg@comcast.com>
Source record: 90855

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:d602i0djgrsb67j3ugd82j5h5uqk18mii6@4ax.com...
> On 16 Aug 2004 11:11:54 -0700, n1jpr@hotmail.com (SpamHog) wrote:
>
> >I have a low-power 4:1 toroid balun almost ready in a little plastic
> >box. In order to keep the rain out, ...
> >
> >Is there any electrical con to be considered?
>
> Hi OM,
>
> It increases the input to output capacity (reduces isolation).
>
> Use the lid to keep the rain out. Invest your time in its seal.
>
> If you want a hard, hard wax, visit a dental supplier, or a nearby
> laboratory. They use very hard waxes for investment molds. Or they
> used to....
>
> 73's
> Richard Clark, KB7QHC

It is almost impossible to keep all moisture out. This will condense when
the temperature drops. Drill some very small drain holes in the bottom
(after you have sealed it the best you can).

Tam/WB2TT

1935. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 04:12:22 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <aAfUc.6730$3I1.3782@bignews5.bellsouth.net>
Source record: 90856

Ok, so the acceleration is in the phase-shifting between the adjacent coils
?
If I interpret that correctly, then its not a 'real' acceleration, but a
simulated acceleration - much like using pulsating DC to generate simulated
AC.
If you could describe it in terms a normal dummy like myself could
understand or at least draw a better picture, your theory may be taken more
seriously.
You say Roy's word is not good enough - But Roy has demonstrated his
expertise in this area time and time again.
I come here to learn from folks like Roy - and to inject some of my own
thoughts from time to time.
You come to the group asking for comments - and you got them.
You did not speak in terms of technical details - so a reply using technical
details may not be deserved.
There is no disgrace in asking questions (like you said) - but rejecting
expert opinions can be seen as a disgrace in some instances.

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:dJeUc.269797$%_6.33856@attbi_s01...
> Hi Hal, nice to meet you
> What I have is not really a prposition or a legitimate theory, it is just
> something that apears to be in error but I do not understand why so I
wanted
> something we had to e4xplain in exams which came from first principles. It
> was basic pricipals that I was looking for wether it be a comparison of
area
> under a current curve per unit length compared to area when applied to a
> circle or even possibly a mathematical analusis. Roys says I am in error
and
> should accept it because he said so. He is knoweledgable but just his word
> is not good enough.
> Richard came in with his bag of tricks with the introduction of "power"
> which if nothing is stated he is off and running with an augument on the
> net. Ofcourse I did not fall for it, Soooooo I am reconciled to the
fact
> that
> there is not enough pertinent knoweledge out there that can allow
> reasonable discussion.
> Still I find no discrace in asking the question even tho it may advertise
my
> own lack of knoweledge.
> Note you referenced speed per unit length in terms of frequency where as
I

> was refering to a constant speed
> where the energy input should have transpire3d into acceleration buyt
> instead added another vector that like a race care going round a circular
> circuit. This is going at constant speed all the time with the foot hard
> nown on the accelorator to counteract centrifugal forces evidenced by a
> spray of dirt that continues at a consistent rate and not in cyclic form
if
> one accelerates on a straight runway.
> In both cases we have constant speeds but we also have a difference in
> phases. Enough said. I have typed up the program to check things out again
> which has amounted to 400 wire segments plus the use of 20 variables to
> gauge the distances between each succesive coils so I can build the darn
> thing again from scratch and thus satisfy myself
> on the why's and where fores rather than partaking in what will become a
> slanging thread that occurs in a somewhat regular fashion. If I am remiss
on
> missing an actual true posting that discusses in detaILwhat I was
> asking for then please draw my attention to it as I seemed somehow to have
> missed it
> Very best regards
> Art
> ,
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:NBcUc.8084$B53.4377@bignews6.bellsouth.net...
> > Art,
> > An interesting proposition. Acceleration of a radio wave.
> > If this succeeds, then does this mean that the wave travels 'faster'
than
> > other waves?
> > If that's true - and the wave does travels faster - then it follows that
> the
> > *length* of the propogated wave would be shorter.
> > If the length is shorter - then we would perceive it as a shift in
> > frequency - because we assume all RF travels at the same speed.
> > For instance - if the wave 'started off' 2 meters long - and was
> accelerated
> > to double the speed, then the wavelength would be only one meter long.
> > Our assumptions may be invalid.
> > We can only base our responses on what we have learned, but if this is
> new,
> > then it folllows that we have not learned it yet.
> > Let's hear more about your theory.
> >
> > "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
> message
> > news:VH6Uc.324209$XM6.205186@attbi_s53...
> > > Gentlemen
> > > I have in the past alluded not only radiation from a straight element
> but
> > > also the ADDITION of radiation

> > > occuring from a bent element. Nobody has commented on the authentisity
> of
> > > this statement and I have not come acros anything in my own collection
> of
> > > books.
> > > Now my present antenna consists of various loops connected in both a
> > > clockwise and clockwise radiation form such that the circular
> polarisation
> > > cancells leaving pure vertical polarisation.. The loops are separatred
> in
> > a
> > > way that intercapacity of the spiral loops is reduced as well as
> circular
> > > cancellation All of this is based on my gut feeling that R.F.current
> > flowing
> > > around a circular radiating element. What I ask for for those who have
a
> > > deeper background of R.F. is verification of my assumption
> > > that extra radiation becomes available.
> > > Appreciate any comments on this irregular aproach as I cxannot find
> > guidance
> > > in the books.
> > > A serious question regarding added radiation from an element in the
hope
> > > that insight is provided even tho it may expose the fallacy of my
> aproach.
> > > Thanks in advance
> > > Art
> > >
> > >
> >
> >
> > ---
> > Outgoing mail is certified Virus Free.
> > Checked by AVG anti-virus system (http://www.grisoft.com).
> > Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
> >
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>
>

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004

1936. Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 05:44:13 UTC
From: Heavy Hitter <echostar@thaimail.org>
Message-ID: <NWgUc.26223$SC1.15602@nwrddc03.gnilink.net>
Source record: 90858

Is AM Radio Harmful?
By Stephen Leahy

Story location: http://www.wired.com/news/medtech/0,1286,64579,00.html

02:00 AM Aug. 16, 2004 PT

Korean scientists have found that regions near AM radio-broadcasting towers had 70 percent more leukemia deaths than those without.

The study, to be published in an upcoming issue of the International Archives of Occupational and Environmental Health, also found that cancer deaths were 29 percent higher near such transmitters.

Two years ago an Italian study found death rates from leukemia increased dramatically for residents living within two miles of Vatican Radio's powerful array of transmitters in Rome.

The Koreans looked at the death rates in 10 regions with AM radio-transmitting towers broadcasting at more than 100 kilowatts and compared them with control areas without transmitters. The substantially higher cancer mortality in those who lived within two kilometers of the towers led researchers to conclude that more investigation was needed.

However, they also said their study did not prove a direct link between cancer and the transmitters.

"There have been many studies like these, and they aren't very convincing," said Mary McBride, an epidemiologist at the British Columbia Cancer Agency. Many other factors could have contributed to those cancer rates, said McBride, who has headed a number of similar studies and found no direct link.

Equally important is that studies in the lab don't show how radio waves can produce cancers, she said.

Debate continues over the health effects of radio waves from transmitters, both large and small, and other forms of electromagnetic fields, including power lines and microwaves.

Sam Milham, a Seattle-based epidemiologist and a pioneer in electromagnetic-field research, is convinced there are health effects. "Lots of research papers from around the world show increased cancers near transmitters, although TV and FM transmitters are more often implicated."

Moreover, many lab studies show low-frequency EMF disrupt living cells, Milham asserts. Critics like McBride say such results are often difficult to reproduce at other labs. Milham says that's because of differences in

the Earth's magnetic field and stray EMF.

In an attempt to settle some of this, California's Department of Health Services reviewed all the current studies of EMF risks from power lines, wiring and appliances in 2002. It found no conclusive evidence of harm. However, links to childhood leukemia, adult brain cancer and Lou Gehrig's disease could not be ruled out.

"I'm convinced that politics and corporate interests are behind denials (that say) there are no health effects," said Milham.

Meanwhile, the FDA and the World Health Organization are urging more studies, especially of radio waves from cell phones.

1937. NJQRP Squirt 80M antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 05:45:56 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040817014556.23098.00003683@mb-m07.aol.com>
Source record: 90859

From April 2001, QST.

The NJQRP squirt is a 40M dipole with each leg at 34 ft, feed with 300 ohm twinlead for use on 80M. I'm thinking of putting one up, but using 450 ohm window line going to my trusty Dentron Jr. antenna tuner. How will this antenna perform on 75m-6m?

My guess is that since each leg is more than 1/2 wavelength on the bands above 20m, it will exhibit some gain. On 40m, it would be a dipole, and according to the article, will exhibit about 1 S unit (7.7 DB) with 300 ohmline of loss on 75/80m.

I do not have the means to model this antenna. The antenna will be between 10 and 20 feet high (I'm looking for NVIS for ARES on 75m & 40m). With these parameters, will the antenna be ok for DX on the higher bands? Is it an ok compromise until I put up a loop antenna? I'm just interested in getting a signal out!

Randy ka4nma

you can email me directly at theplanters95NOSPAM@aol.com, after making the neccessary correction.

1938. Re: Efficiency of radial system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 06:17:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vsogh09lijp3cru6jfs848jk6egl5cf5kd@4ax.com>
Source record: 90860

On Tue, 17 Aug 2004 06:31:48 GMT, "John" <my-callsign@qsl.net> wrote:

>Is there a PRACTICAL way of measuring the the improved efficiency that a
>radial system brings to a ground mounted quarter wave vertical antenna?
>
>I was wondering how my 30 radials over clay soil improve antenna efficiency.
>Are there any easy measurments that I can do?

Hi John,

There are claims and there are measurements (and there is even
software to make the claims for you). Stick with measurements.

If your vertical antenna qualifies as a thin wire radiator, it will
exhibit, at resonance, a certain resistive component - let's call it
37 Ohms (caveat: this varies with wire/tube size which in turn
impacts exactly how tall, how resistive, and how much Q the radiator
has at resonance).

The trick is to be able to measure this resistive component within an
Ohm or two (or five). You may be able to infer it through the use of
a SWR meter if no other methods are available, and this method may
provide enough data to move on.

If you measure that same 37 Ohms, guess what? you've done your best
and no more radials are required. However, chances are you will read
slightly more than 37 Ohms (or whatever the starting figure is for
your style of antenna - style meaning a thick or thin radiator).

If you measure in the vicinity of 50 Ohms, you can be sure that you
have an additional resistive component that is combining with the
radiation resistance - two resistors in series. One of those in
combination is that same 37 Ohms (with the usual caveat of style) and
the other is the loss of ground, or the loss of poor fittings (tighten
connections). This may be improved through the addition of more
radials.

However, in the pursuit of nirvana (or simply wanting to dress like
you've obtained nirvana), be advised that few, if any, will notice
your "improvement" whatever you do.

Another caution, you may even be tricked by the loss of the cable
going to the antenna. This loss subdues the actual SWR at the
radiator and presents a more modest reading at the transmitter. In
other words, an antenna exhibiting the classic 37 Ohms may appear to
be a faithful 50 Ohm match through the loss of transmission line.

So, what kind of data do you have to offer? Also describe how you performed the measurement and how remote the antenna is from where you made the measurement. Also, give a description of the area surrounding the antenna. Like, is it in the forest? Is it slapped up next to your house that has a metal roof? You know, interesting details like that which perturb the purity of science with the world's reality.

73's
Richard Clark, KB7QHC

1939. Efficiency of radial system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 06:31:48 UTC
From: John <my-callsign@qsl.net>
Message-ID: <oDhUc.18$A_6.9@newsfe2-gui.ntli.net>
Source record: 90857

Hi

Is there a PRACTICAL way of measuring the the improved efficiency that a radial system brings to a ground mounted quarter wave vertical antenna?

I was wondering how my 30 radials over clay soil improve antenna efficiency. Are there any easy measurments that I can do?

Thanks

John
G4IRN.

1940. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 07:05:16 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <10i3blte7b9a5cf@corp.supernews.com>
Source record: 90861

I guess my question would be... WHY do you need 200 watts on 2 meters or
440mhz for that matter??

Hal Rosser wrote:
> I would be very tempted to try a discone in this case - just to say I made
> one.
> practically no gain - but I hear they have extremely good bandwidth - and
> different enough to start interesting QSOs locally
>
>
>
> "Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
> news:10huuo8a91fkn72@corp.supernews.com...
>
>>Does anybody have any good ideas for a good dual band
>>2 meter/440 antenna? This would be a base antenna and
>>should be capable of handling 200 watts.
>>
>>
>>Thanks
>>
>>
>>Chip
>
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>
>

1941. CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 07:48:42 UTC
From: Sarah Fender <Sfender@carolina.rr.com>
Message-ID: <uLiUc.198596$tH1.10149043@twister.southeast.rr.com>
Source record: 90862

Is ther anyway you cna prevent your call sign from being looked up on the internet. I ask because when I google my call sign all the expected info is found but when I google someone elses(just one call) I find nothing to their idenity. IS it possible to block this information?

1942. Re: Icom 229H help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 08:00:09 UTC
From: Sarah Fender <Sfender@carolina.rr.com>
Message-ID: <dWiUc.198597$tH1.10149118@twister.southeast.rr.com>
Source record: 90863

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:v27Tc.170183$wH4.10827647@twister.southeast.rr.com...
> Does an Icom 229H use an internal battery. If so what happens if the
battery
> dies.
>
>
Well last time I had the radio in use was 1995. Found the problems I was
having was due to having the wrong microphone plugged into it.. Yes it does
have a battery that is still working after all this time. Once I got the
right microphone hooked up I discovered it still had all the local repeaters
programmed in just as I had put it away in'95. Still wary of the battery
though after all this time It could fail anytime now.. I have a scanner
board that uses a Super Capacitor to maintain memory I was wondering a bout
the feasability of replacing the battery with one of these. I cant find my
schematic for the radio so I have no idea what I would have to do to provide
a way of charging the cap.

1943. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 08:14:33 UTC
From: Ralf Ballis - DL2MRB <r_ballis@hotmail.com>
Message-ID: <cfsetguma06$1@news.t-online.com>
Source record: 90864

In this case I would say no one have any information about this call sign on his page or there wasn't enough time for search engines to find it.
Any person who have takes any information about call signs, names, etc. in connection of a person in his page and any search engines will be able to found this periodical and write it to the database.

Regards

Ralf

--
Vy 73 es 55 de Ralf, DL2MRB
E-Mail: dl2mrb@darc.de

1944. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 09:17:43 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408170117.17fe1a54@posting.google.com>
Source record: 90865

Thank you all!

Here's what I intend to do:

- coat everything internally,
but without a space-filler

- seals

* fixed, for plugs and tieposts: a locally made silicone based strong
adhesive/sealant + external soft silicone coat

* reopenable, for the box lid: just soft silicone sealant

* wire tieposts & coax plug:
- soft silicone sealant, left to dry completely
- then wrapped in aluminum foil (no metal contact)
- then wrapped in friction tape, held in place by telephone twisted
pair;
it's another suspenders-and-belt trick I have used this to
weatherproof all sorts of antenna contacts, some lasting well over 10
years

This for keeping water out,
But, in case it does somehow get in, what about WEEP HOLES?

1945. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:10:19 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <eed3i0dvo7383chtepg58divm1doom8g71@4ax.com>
Source record: 90866

On Mon, 16 Aug 2004 11:42:19 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>It's not clear to me how you could get quantitative data from
>measurements in a styrofoam container. Let's say you put 100 watts into
>the antenna for five minutes and the temperature rise (of the coil?
>helical winding? air?) was 10 degrees C. How would you calculate the
>loss or efficiency from that information?

First of all, the test should not be run for 5 minutes, but until a thermal equilibrium inside the container has been established, possibly mixing the air inside the container with a fan. This solves the thermal mass problems when equilibrium has been established. Measure the power fed to the antenna.

The temperature outside of the container should remain stable during the test. Then the temperature difference across the container wall is known, as well as the wall surface area and thickness and hopefully also the thermal conductivity for styrofoam (from the manufacturer). Now the thermal resistance of the container as well as the temperature difference is known and the power dissipation can be calculated. This is very similar to calculating the heatsink requirements for transistors.

If the thermal conductivity for the styrofoam is not known, run a predefined amount of power to the antenna until equilibrium has been reached and measure the temperature. Inside the container, disconnect the antenna, attach the feedline to a dummy load (possibly attaching it to some large metallic part of the antenna to act as a heatsink). Close the container and feed RF-power into the dummy load at an adjustable power level, until the same stable temperature is reached as with the actual antenna. Measure the power fed into the dummy load. This will eliminate the feedline conductivity problem as well as offset errors in the power meter (but not linearity errors).

This way the power dissipated by the dummy load is the same as the power dissipated in the antenna losses in the first place and thus, the efficiency can be calculated.

To avoid any power meter linearity problems, reconnect the antenna again, feed in the original full power and verify that there is a thermal equilibrium at the original temperature and outside temperature. Insert a calibrated step attenuator ahead of the power meter and adjust it until it reads the same value as in the dummy load test.

You can then read directly from the step attenuator, how many dBs the total full transmitter power was compared to the dummy load power which is also the antenna thermal dissipation value. A 10 dB setting would indicate that the thermal losses are only 10 % of the total power or 90 % antenna efficiency, a 3 dB reading would indicate that half of the power is radiated and the other half is dissipated in the antenna, thus 50 % efficiency. However, you would need a step attenuator with 0.1 steps to measure the worst antennas :-).

Paul OH3LWR

1946. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:28:07 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408170116.6f0ced7e@posting.google.com>
Source record: 90867

Thank you all!

Here's what I intend to do:

- coat everything internally,
but without a space-filler

- seals

* fixed, for plugs and tieposts: a locally made silicone based strong
adhesive/sealant + external soft silicone coat

* reopenable, for the box lid: just soft silicone sealant

* wire tieposts & coax plug:
- soft silicone sealant, left to dry completely
- then wrapped in aluminum foil (no metal contact)
- then wrapped in friction tape, held in place by telephone twisted
pair;
it's another suspenders-and-belt trick I have used this to
weatherproof all sorts of antenna contacts, some lasting well over 10
years

This for keeping water out,
But, in case it does somehow get in, what about WEEP HOLES?

1947. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:28:12 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408170117.26f142d7@posting.google.com>
Source record: 90868

Thank you all!

Here's what I intend to do:

- coat everything internally,
but without a space-filler

- seals

* fixed, for plugs and tieposts: a locally made silicone based strong
adhesive/sealant + external soft silicone coat

* reopenable, for the box lid: just soft silicone sealant

* wire tieposts & coax plug:
- soft silicone sealant, left to dry completely
- then wrapped in aluminum foil (no metal contact)
- then wrapped in friction tape, held in place by telephone twisted
pair;
it's another suspenders-and-belt trick I have used this to
weatherproof all sorts of antenna contacts, some lasting well over 10
years

This for keeping water out,
But, in case it does somehow get in, what about WEEP HOLES?

1948. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:28:15 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408170117.5d4fcf5c@posting.google.com>
Source record: 90869

Thank you all!

Here's what I intend to do:

- coat everything internally,
but without a space-filler

- seals

* fixed, for plugs and tieposts: a locally made silicone based strong
adhesive/sealant + external soft silicone coat

* reopenable, for the box lid: just soft silicone sealant

* wire tieposts & coax plug:
- soft silicone sealant, left to dry completely
- then wrapped in aluminum foil (no metal contact)
- then wrapped in friction tape, held in place by telephone twisted
pair;
it's another suspenders-and-belt trick I have used this to
weatherproof all sorts of antenna contacts, some lasting well over 10
years

This for keeping water out,
But, in case it does somehow get in, what about WEEP HOLES?

1949. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:28:33 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408170116.5073035c@posting.google.com>
Source record: 90870

Thank you all!

Here's what I intend to do:

- coat everything internally,
but without a space-filler

- seals

* fixed, for plugs and tieposts: a locally made silicone based strong
adhesive/sealant + external soft silicone coat

* reopenable, for the box lid: just soft silicone sealant

* wire tieposts & coax plug:
- soft silicone sealant, left to dry completely
- then wrapped in aluminum foil (no metal contact)
- then wrapped in friction tape, held in place by telephone twisted
pair;
it's another suspenders-and-belt trick I have used this to
weatherproof all sorts of antenna contacts, some lasting well over 10
years

This for keeping water out,
But, in case it does somehow get in, what about WEEP HOLES?

1950. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:28:40 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408170117.6c68998a@posting.google.com>
Source record: 90771

Thank you all!

Here's what I intend to do:

- coat everything internally,
but without a space-filler

- seals

* fixed, for plugs and tieposts: a locally made silicone based strong
adhesive/sealant + external soft silicone coat

* reopenable, for the box lid: just soft silicone sealant

* wire tieposts & coax plug:
- soft silicone sealant, left to dry completely
- then wrapped in aluminum foil (no metal contact)
- then wrapped in friction tape, held in place by telephone twisted
pair;
it's another suspenders-and-belt trick I have used this to
weatherproof all sorts of antenna contacts, some lasting well over 10
years

This for keeping water out,
But, in case it does somehow get in, what about WEEP HOLES?

1951. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 10:52:32 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <4lo3i0p079q97cbbje969dc09hboshams2@4ax.com>
Source record: 90772

On Mon, 16 Aug 2004 23:05:16 -0800, Paul Jordan <pauljordan@gci.net>
wrote:

>I guess my question would be... WHY do you need 200 watts on 2 meters or
>440mhz for that matter??
>
Many repeaters work perfectly well with 75 to 100 watts.

To get better coverage in and out, altitude is your best bet. Our
club's repeater (actually both of these bands) is on top of a 6 story
building, and others in the area are located even higher above mean
ground level.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

1952. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 11:02:57 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040817070257.25456.00003338@mb-m29.aol.com>
Source record: 90773

>Korean scientists have found that regions near AM radio-broadcasting towers
>had 70 percent more leukemia deaths than those without.
>

They are full of it!
Lawyers in action to milk money from another "danger"
Look how many broadcast engineers that lived inside of AM station antennas are
still alive and in their 90ies.
RF kills cancers (properly used).

Yuri, K3BU

1953. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 11:12:46 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040817071246.25456.00003339@mb-m29.aol.com>
Source record: 90774

> So, when you tell me to "forget the igloo", you seem to have placed
>yourself in a position where you think you know how to evaluate antenna
>efficiency and that I dont. I dont think you are *that* smart.
>
> Jerry

You win, I ain't so smart as I thought. :-)
I thought that antenna is supposed to radiate RF in the direction and with pattern one desires. That's what I want to measure, how effective radiator it is, how much RF it produces at the point of interest.
If you want to know how well it works as a heater, more power to you.
I am not in a pissing contest who is "smarter", I was trying to convey some practicality and what I do and what I am interested in.
Over and out!

Back to DR1 (www.computeradio.us)

Yuri, K3BU

1954. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 11:22:11 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040817072211.25456.00003340@mb-m29.aol.com>
Source record: 90775

>Dear Group:
> One may see a patent application for the "SteppIR" antenna on the
>PTO's web site.
>
> Look for:
> 20020171598 Tunable antenna system
>
> Punch in the above number here:
>http://appft1.uspto.gov/netahtml/PTO/srchnum.html
>
> The application issued as patent 6,677,914.
>
> I can not remember if this has been posted. 73 Mac N8TT

Thanks, very well done!

How can you see the drawings?

Yuri, K3BU

1955. Re: AM BCB reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 11:55:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2oea0hF9m7uhU1@uni-berlin.de>
Source record: 90776

"Tam/WB2TT" wrote
> Isn't there a zone where you tend to get cancellation
>between groundwave and skywave?

Yes, that is what I have been writing in my posts on this subject line. The RF phase of the skywave varies independently from the ground wave. Some times it reinforces the ground wave; some times reduces it.

Further, both reinforcement and reduction can occur at the same time for different RF frequencies across the AM channel, leading to a selective combing effect in the program audio, and/or near loss of the carrier while most of the sidebands are still present. Of course, that produces very high distortion in an envelope detector. AM receivers using synchronous detectors reduce this problem.

Most full time 50kW AM broadcast stations use an antenna system with relatively low radiation at elevation angles above about 45 degrees in order to reduce (but not eliminate) night time interference to their own groundwave. I made up a simple graphic comparing the elevation patterns of vertical antennas used in AM broadcast for four different electrical heights: 90, 180, 195, and 225 degrees. The difference in their high-angle radiation is apparent. Please email me if you would like a copy.

RF

Visit http://rfry.org for FM broadcast RF system papers.

1956. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 12:49:21 UTC
From: "aunwin@insightbb.com"
Message-ID: <l9nUc.268067$a24.245272@attbi_s03>
Source record: 90777

No Richard I am not trolling I am very serious. At the same time I am always wary of any aproach by you
as the subject always get shifted and then we are off to the races.
Cecil pointed it out correctly with respect to power. If you were to solve a parallel circuit using complex circuit methyods the criteria is energy conservation
but where individual parts change their form of energy s we cannot glibly say that it revoves about
power or that I am referring to perpetual motion which is how Roy dismisses the thread but with no supporting data.
Now you say that accelleration and decellaration of protons are not the true basis for radiation
which certainly suggests that the subject is moot as the question starts off with a fallacy.
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:3tggh01ol4ivlurnu014pl054hf5b6g2dc@4ax.com...
> On Tue, 17 Aug 2004 03:13:14 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> > Soooooo I am reconciled to the fact
> >that
> >there is not enough pertinent knoweledge out there that can allow
> >reasonable discussion.
>
> In otherwords you are trolling.

1957. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 13:03:03 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10i40egtmqhk968@corp.supernews.com>
Source record: 90778

Dear Yuri:
The drawings are TIFF files. As I understand it, the Japanese
patent office was using TIFF and the US PTO just followed their usage.
In my opinion, PDF should have been used for everything.
So, one needs a reading-program that is able to display TIFF files.
I use Quick View Plus. A look here
http://www.uspto.gov/patft/help/images.htm
will find what the PTO describes as "free, unlimited TIFF plug-ins."

400 dpi PDF files would have been much better for everyone! Smaller
files, better looking pages, and searching capability.

Let us know how things worked out.

73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040817072211.25456.00003340@mb-m29.aol.com...
<snip>
>
>
>
> Thanks, very well done!
>
> How can you see the drawings?
>
> Yuri, K3BU

1958. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 13:13:33 UTC
From: "aunwin@insightbb.com"
Message-ID: <1wnUc.272613$%_6.270403@attbi_s01>
Source record: 90779

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:aAfUc.6730$3I1.3782@bignews5.bellsouth.net...
> Ok, so the acceleration is in the phase-shifting between the adjacent
coils
> ?
> If I interpret that correctly, then its not a 'real' acceleration, but a
> simulated acceleration - much like using pulsating DC to generate
simulated
> AC.
Well radiation is certainly a series of "pulses" as the radiation consists
of enclosed
waves and yet the speed of generation is constant and only the constituents
of total energy
undergo change. This is how I visualise creation of radiation on a straight
element.
Now we come to a element that is circular. I still see the generation
of radiation as generated on a strraight radiator but I now see that the
radiation has a component
as shown by a added vector as in centrifugal force which because the
radiator is circular
is constant. Now I am not proposing a new theory I am asking for a an
explanation why this is fallacious
Art

> If you could describe it in terms a normal dummy like myself could
> understand or at least draw a better picture, your theory may be taken
more
> seriously.
> You say Roy's word is not good enough - But Roy has demonstrated his
> expertise in this area time and time again.
> I come here to learn from folks like Roy - and to inject some of my own
> thoughts from time to time.

Don't we all ? But sometimes Roy's words of wisdom does not satisfy the
questioner
asks for the underpinnings of the statement. Roy feels an answer from him is
all that is required
as in the word of God and he is not interested in trivialities and may even
leave the group for a while

> You come to the group asking for comments - and you got them.
> You did not speak in terms of technical details - so a reply using
technical
> details may not be deserved.

> There is no disgrace in asking questions (like you said) - but rejecting
> expert opinions can be seen as a disgrace in some instances.

I agree but a answer that states it does not obey natures laws if one cannot
supply the illustration on how it occurs
so any request for backup can easily be seen as rejection by some since the
words of God have been given>
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:dJeUc.269797$%_6.33856@attbi_s01...
> > Hi Hal, nice to meet you
delete> > What I have is not really a prposition or a legitimate theory, it
is just
> > so

1959. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 13:13:39 UTC
From: j999w@aol.com
Message-ID: <20040817091339.14599.00001819@mb-m29.aol.com>
Source record: 90781

A ham callsign?

Online info is a good thing, saves you the effort of giving out your address if you want to get a QSL from the bloke you're working.

Why would you want to block your info ... something to hide???

jw
k9rzz

1960. Re: BCB DX Web site ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 13:14:10 UTC
From: j999w@aol.com
Message-ID: <20040817091410.14599.00001820@mb-m29.aol.com>
Source record: 90780

www.google.com

BCB DX

jw
k9rzz

1961. Re: Random length wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 13:54:26 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cft2mi$fd2$1@sparta.btinternet.com>
Source record: 90782

> >Gentlemen,
> >I installed a 140 ft wire in hopes to match it on all HF bands. It
> >plays nicely through my ATU. I would like to modify this setup by
> >using about 20 ft.of coax inside the house (for a better look). Is
> >there a known matching scheme to accomodate the wire to the coax? What
> >other problems might I encounter?
==========

The known matching scheme is a tuner at the coax/antenna wire junction. For multi-band operation a balun is fairly useless.

But if you don't fancy walking 20 feet to re-tune every time you change frequency, reading the SWR meter with a telescope, why not do what I do. I just extend the antenna wire into the house using plastic insulated 18 gauge wire or something similar.

On the 160 and 80 meter bands you will notice no difference in performance or behaviour. Just a difference in tuner settings. On the 15 and 10 meter bands there might be an increase in RF inside the house over what you usually get. You always get SOME RF in the shack/house with end-fed antennas.

For an endfed wire you need a good ground near to the end of the antenna. When the end of the antenna is in the house the domestic plumbing system makes a very good ground. The hot and cold metal water pipes, with pipes to central heating radiators in each room, constitute an excellent set of long and thick "radials". It would be a great pity not to make use of them. Make 1, 2 or perhaps 3 connections from the transmitter to different nearest water pipes. Unobtrusive 18-gauge bare wire under carpets is fine. The transmitter will also pick up an RF ground via the 110V or 230V power wiring.

Reg, G4FGQ

1962. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 14:00:07 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <1134i0poto6nmjqtge2jc54o0h22vif8md@4ax.com>
Source record: 90783

On 17 Aug 2004 11:12:46 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:

>I thought that antenna is supposed to radiate RF in the direction and with
>pattern one desires. That's what I want to measure, how effective radiator it
>is, how much RF it produces at the point of interest.

Of course that is what everyone would want to measure, but unless you
are working in the millimeter bands in a non-echoic chamber,
determining the true (absolute) radiation pattern can be quite
problematic.

You could fly around in a plane with a calibrated field strength meter
in trying to determine the true radiation pattern of the antenna.
However, the variations in ground conductivity may create a large
variations if the measurement is repeated at different places,
especially with unbalanced antennas.

Thus, it would help a lot, if the efficiency could be determined
separately from the radiation pattern, since much of the calibration
problems could be eliminated. The calorimetric method of measuring the
heat dissipated by the losses is one usable method to get the
efficiency.

If some manufacturer claims extraordinary _gain_ figures for some
LF/MF/HF antenna, you should publicly ask which plane was used for the
measurement and when were these measurements made. You can then check
the local airports, if that plain was in the air at that time.

Paul OH3LWR

1963. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 14:27:36 UTC
From: wa0goz@arrl.net
Message-ID: <412215D8.A4@arrl.net>
Source record: 90784

Sarah

All that means is that you have posted to newsgroups, and the people
that haven't don't get caught by Google. Google only can search for
someone who would have published something. You can't stop that kind
of finding. If you published, Google will find you. If not, it won't.

Henry WA0GOZ

PS Try my callsign.

Sarah Fender wrote:
>
> Is ther anyway you cna prevent your call sign from being looked up on the
> internet. I ask because when I google my call sign all the expected info is
> found but when I google someone elses(just one call) I find nothing to their
> idenity. IS it possible to block this information?

1964. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 14:52:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5k64i01k9s8ps0ebvn5cg0uqq3fnr81sqh@4ax.com>
Source record: 90785

On Tue, 17 Aug 2004 12:49:21 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>No Richard I am not trolling I am very serious.

No Art, you are trolling. There is no one in this group who could
accelerate charge without power BUT YOU? Absurd in the extreme!

You have shown absolutely no interest in participating in a rational
discussion about the requirments of circular motion, but instead you
cavalierly discard all of established physics going back to Newton.

Hence your contempt of the topic clearly reveals you are trolling.

1965. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 15:11:38 UTC
From: fractenna@aol.com
Message-ID: <20040817111138.25422.00003505@mb-m29.aol.com>
Source record: 90787

>First of all, the test should not be run for 5 minutes, but until a
>thermal equilibrium inside the container has been established,
>possibly mixing the air inside the container with a fan. This solves
>the thermal mass problems when equilibrium has been established.
>Measure the power fed to the antenna.
>
>The temperature outside of the container should remain stable during
>the test. Then the temperature difference across the container wall is
>known, as well as the wall surface area and thickness and hopefully
>also the thermal conductivity for styrofoam (from the manufacturer).
>Now the thermal resistance of the container as well as the temperature
>difference is known and the power dissipation can be calculated. This
>is very similar to calculating the heatsink requirements for
>transistors.
>
>If the thermal conductivity for the styrofoam is not known, run a
>predefined amount of power to the antenna until equilibrium has been
>reached and measure the temperature. Inside the container, disconnect
>the antenna, attach the feedline to a dummy load (possibly attaching
>it to some large metallic part of the antenna to act as a heatsink).
>Close the container and feed RF-power into the dummy load at an
>adjustable power level, until the same stable temperature is reached
>as with the actual antenna. Measure the power fed into the dummy load.
>This will eliminate the feedline conductivity problem as well as
>offset errors in the power meter (but not linearity errors).
>
>This way the power dissipated by the dummy load is the same as the
>power dissipated in the antenna losses in the first place and thus,
>the efficiency can be calculated.
>
>To avoid any power meter linearity problems, reconnect the antenna
>again, feed in the original full power and verify that there is a
>thermal equilibrium at the original temperature and outside
>temperature. Insert a calibrated step attenuator ahead of the power
>meter and adjust it until it reads the same value as in the dummy load
>test.
>
>You can then read directly from the step attenuator, how many dBs the
>total full transmitter power was compared to the dummy load power
>which is also the antenna thermal dissipation value. A 10 dB setting
>would indicate that the thermal losses are only 10 % of the total
>power or 90 % antenna efficiency, a 3 dB reading would indicate that
>half of the power is radiated and the other half is dissipated in the
>antenna, thus 50 % efficiency. However, you would need a step

>attenuator with 0.1 steps to measure the worst antennas :-).
>
>Paul OH3LWR
>

Paul, simple approaches to calorimetry are, as you know, very difficult. Having done them extensively, I don't recommend radio amateurs try it, as the likelihood of missing even a second-order issue/factor is high.

Knowledge of Netwon's equations is essential vis a vis heating and cooling rates and equilibrium. (again, you know this; others might not.)

Since the DLM/DLD is a monochromatic antenna, it readily fits into a Wheeler cap approach for efficiency measurement. There was no data nor discussion of such an attempt in this veign.

There are no valid efficiency measurements of the DLM from the data I saw. If someone sees otherwise, kindly let us know and enlighten us.

73,
Chip N1IR
.

1966. Re: Random length wire antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 15:42:28 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cft913pkn1@hercules.btinternet.com>
Source record: 90789

Of course, if you have an automatic ATU you have no problems. Just locate it at the junction of the end-fed antenna wire and the coax and merrily away you go.

Reg.

1967. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 15:50:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tn94i01r6v3oa9jt0or9ug99be7htlchln@4ax.com>
Source record: 90790

On Tue, 17 Aug 2004 13:10:19 +0300, Paul Keinanen <keinanen@sci.fi>
wrote:

>First of all, the test should not be run for 5 minutes, but until a
>thermal equilibrium inside the container has been established,
>possibly mixing the air inside the container with a fan.

Hi Paul,

First, you show that this is not an intractable problem, merely one
that requires care. Good work.

However, as to the statement above, and the presumptions that follow,
there is no equilibrium to observe as the test implementation has been
described. You are pouring calories into an insulated environment
which can only raise temperature without end (short of destruction, of
course).

As I described elsewhere, this is called a caloric bomb, and as such
should be limited in time for all comparisons. What you are
describing requires a steady flow of coolant through the chamber where
you measure the inlet and exhaust temperatures and use THAT
differential. Care must be given to not exhaust into the inlet, and
to maintain the inlet with a body of constant temperature air (to
simplify matters).

The problem is not really that difficult - it only takes attention to
detail such as your response indicates.

73's
Richard Clark, KB7QHC

1968. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:02:21 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <h_pUc.27739$SC1.16929@nwrddc03.gnilink.net>
Source record: 90791

Heavy

It is quite possible that the findings of the Korean scientists who
authored this publication are in disagrement with the findings of the
scientists here in Los Angeles Calif..
I see that many new homes are being built very close to the base of KNX
antenna tower. Since OSHA and other agencies like that have so much control
over "health hazards', I'd expect any known problems from AM radio waves
would have prevented the builders from building the homes.

Jerry

"Heavy Hitter" <echostar@thaimail.org> wrote in message
news:NWgUc.26223$SC1.15602@nwrddc03.gnilink.net...
> Is AM Radio Harmful?
> By Stephen Leahy
>
> Story location: http://www.wired.com/news/medtech/0,1286,64579,00.html
>
> 02:00 AM Aug. 16, 2004 PT
>
> Korean scientists have found that regions near AM radio-broadcasting
towers
> had 70 percent more leukemia deaths than those without.
>
> The study, to be published in an upcoming issue of the International
> Archives of Occupational and Environmental Health, also found that cancer
> deaths were 29 percent higher near such transmitters.
>
> Two years ago an Italian study found death rates from leukemia increased
> dramatically for residents living within two miles of Vatican Radio's
> powerful array of transmitters in Rome.
>
> The Koreans looked at the death rates in 10 regions with AM
> radio-transmitting towers broadcasting at more than 100 kilowatts and
> compared them with control areas without transmitters. The substantially
> higher cancer mortality in those who lived within two kilometers of the
> towers led researchers to conclude that more investigation was needed.
>
> However, they also said their study did not prove a direct link between
> cancer and the transmitters.
>
> "There have been many studies like these, and they aren't very
convincing,"
> said Mary McBride, an epidemiologist at the British Columbia Cancer

Agency.
> Many other factors could have contributed to those cancer rates, said
> McBride, who has headed a number of similar studies and found no direct
> link.
>
> Equally important is that studies in the lab don't show how radio waves
can
> produce cancers, she said.
>
> Debate continues over the health effects of radio waves from transmitters,
> both large and small, and other forms of electromagnetic fields, including
> power lines and microwaves.
>
> Sam Milham, a Seattle-based epidemiologist and a pioneer in
> electromagnetic-field research, is convinced there are health effects.
> "Lots of research papers from around the world show increased cancers near
> transmitters, although TV and FM transmitters are more often implicated."
>
> Moreover, many lab studies show low-frequency EMF disrupt living cells,
> Milham asserts. Critics like McBride say such results are often difficult
> to reproduce at other labs. Milham says that's because of differences in
> the Earth's magnetic field and stray EMF.
>
> In an attempt to settle some of this, California's Department of Health
> Services reviewed all the current studies of EMF risks from power lines,
> wiring and appliances in 2002. It found no conclusive evidence of harm.
> However, links to childhood leukemia, adult brain cancer and Lou Gehrig's
> disease could not be ruled out.
>
> "I'm convinced that politics and corporate interests are behind denials
> (that say) there are no health effects," said Milham.
>
> Meanwhile, the FDA and the World Health Organization are urging more
> studies, especially of radio waves from cell phones.
>
>

1969. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:09:01 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <taSdnRBoq7PjsL_cRVn-sg@comcast.com>
Source record: 90792

Only if you take the talk shows seriously.

1970. Re: Dipole and Icom AH-4

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:13:22 UTC
From: Roger Adam <roger.adam@remove_this.virgin.net>
Message-ID: <C8qUc.188$A_6.179@newsfe2-gui.ntli.net>
Source record: 90788

Mike,

try here http://www.usfamily.net/web/k9eq/ah4/ah4.htm

regards,

Roger G7JAQ

--

This mailbox protected from junk email by MailFrontier Desktop
from MailFrontier, Inc. http://info.mailfrontier.com

1971. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:15:50 UTC
From: "aunwin@insightbb.com"
Message-ID: <VaqUc.174682$eM2.118205@attbi_s51>
Source record: 90793

You are welcome to your opinion and it has been duly noted and you can now move on. I have no intention
of accepting your bait for another raucuos R.R.A.A. battle upon which you thrive upon to create division.

Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:5k64i01k9s8ps0ebvn5cg0uqq3fnr81sqh@4ax.com...
> On Tue, 17 Aug 2004 12:49:21 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
>
> >No Richard I am not trolling I am very serious.
>
> No Art, you are trolling. There is no one in this group who could
> accelerate charge without power BUT YOU? Absurd in the extreme!
>
> You have shown absolutely no interest in participating in a rational
> discussion about the requirments of circular motion, but instead you
> cavalierly discard all of established physics going back to Newton.
>
> Hence your contempt of the topic clearly reveals you are trolling.

1972. Re: Dipole and Icom AH-4

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:18:16 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cftb48$t5a$1@hercules.btinternet.com>
Source record: 90794

You just need a simple choke balun between the balanced ladder line and the unbalanced tuner.

A choke balun can be made by winding a pair of wires (like 18 or 16 gauge speaker cable) around a 2" diameter ferrite ring. 12 to 18 turns will do provided cable length on the ring is not longer than 1/10th wavelength at the highest frequency of use.

How it works is intuitively obvious.

Reg.

"Michael Melland" <w9wis@charter.net> wrote in message news:10i46v6dvmfff77@corp.supernews.com...
> Anyone feeding a dipole with ladder line feed from an Icom AH-4 ?
>
> I can find articles from people using it with whips and random length
> wires.... but I'd like to feed a dipole with ladder line from it.... one leg
> to the tuner's ground and the other leg the active tuner output. I think I
> would be able to float the tuner without a fixed "ground" connection then
> .... the non active leg acts like a counterpoise in a balanced antenna like
> this right (?).
>
> Mike
>
>
> --
> Michael Melland, W9WIS
> Winneconne, WI USA
> http://webpages.charter.net/w9wis
>
>

1973. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:22:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m3c4i05n3umiav7mfoiupu7i07qtbsp8ks@4ax.com>
Source record: 90795

On Tue, 17 Aug 2004 16:15:50 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:

>You are welcome to your opinion and it has been duly noted and you can now
>move on. I have no intention
>of accepting your bait for another raucuos R.R.A.A. battle upon which you
>thrive upon to create division.

More troll bait

1974. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:33:45 UTC
From: Vito <vito@crosslink.net>
Message-ID: <41223369$0$3997@dingus.crosslink.net>
Source record: 90796

All I found was your full name and address.

<wa0goz@arrl.net> wrote
>
> PS Try my callsign.

1975. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:37:50 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <yvqUc.198625$tH1.10173612@twister.southeast.rr.com>
Source record: 90797

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:VH6Uc.324209$XM6.205186@attbi_s53...
> Gentlemen
> I have in the past alluded not only radiation from a straight element but
> also the ADDITION of radiation
> occuring from a bent element. Nobody has commented on the authentisity of
> this statement and I have not come acros anything in my own collection of
> books.
> Now my present antenna consists of various loops connected in both a
> clockwise and clockwise radiation form such that the circular polarisation
> cancells leaving pure vertical polarisation.. The loops are separatred in
a
> way that intercapacity of the spiral loops is reduced as well as circular
> cancellation All of this is based on my gut feeling that R.F.current
flowing
> around a circular radiating element. What I ask for for those who have a
> deeper background of R.F. is verification of my assumption
> that extra radiation becomes available.
> Appreciate any comments on this irregular aproach as I cxannot find
guidance
> in the books.
> A serious question regarding added radiation from an element in the hope
> that insight is provided even tho it may expose the fallacy of my aproach.
> Thanks in advance
> Art
>
>
Not knowing how you came to your conclusion no one can tell you why you are
wrong.. My uncle used to have a paint and body shop with a 57 Chevy up on a
pole in front of his shop. While the car would make an awful antenna it
would be futile to try to explain why. In another way of saying it would be
like explaining to a student how he missed a math problem when all he shows
is an answer. The best the instructor can do is tell him he is right or
wrong. In your case the instructor would not even be sure which problem he
had done.

1976. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:50:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i4dqhf2l20q4b@corp.supernews.com>
Source record: 90798

Egad. Please go back and read my postings. All I've said is that you can't violate the law of conservation of energy. You shouldn't believe this fundamental principle because Roy says you should -- you should believe it because you've got a grasp of high school level physics, and if you don't have a grasp of high school level physics, perhaps you should get one before getting too carried away with theories about the nature of radiation.

Of course, ignorance is bliss. If you disbelieve or simply choose to ignore conservation of energy, you're then able to make perpetual motion machines and other wonders, including any number of miracle antennas.

And Art, quit whining that "Roy feels an answer from him is all that is required as in the word of God". What's required is that you take the effort to learn a little fundamental physics. I'm sure you can find an adequate explanation of the law of conservation of energy on the web if you have an aversion to books -- written by someone other than Roy. I'm not going to spoon-feed it to a reluctant learner.

Roy Lewallen, W7EL

aunwin@insightbb.com wrote:
> . . . Roys says I am in error and
> should accept it because he said so. He is knoweledgable but just his word
> is not good enough. . .

Hal Rosser wrote:
> . . . You say Roy's word is not good enough - But Roy has demonstrated his expertise in this area time and time again. . .

aunwin@insightbb.com wrote:
> . . .But sometimes Roy's words of wisdom does not satisfy the
> questioner
> asks for the underpinnings of the statement. Roy feels an answer from him is
> all that is required
> as in the word of God and he is not interested in trivialities and may even
> leave the group for a while . . .

1977. Dipole and Icom AH-4

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 16:55:34 UTC
From: Michael Melland <w9wis@charter.net>
Message-ID: <10i46v6dvmfff77@corp.supernews.com>
Source record: 90786

Anyone feeding a dipole with ladder line feed from an Icom AH-4 ?

I can find articles from people using it with whips and random length wires.... but I'd like to feed a dipole with ladder line from it.... one leg to the tuner's ground and the other leg the active tuner output. I think I would be able to float the tuner without a fixed "ground" connection then .... the non active leg acts like a counterpoise in a balanced antenna like this right (?).

Mike

--
Michael Melland, W9WIS
Winneconne, WI USA
http://webpages.charter.net/w9wis

1978. Xium TV dish type antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 17:11:47 UTC
From: Dave <dave@telnet.com>
Message-ID: <n%qUc.312561$JR4.132702@attbi_s54>
Source record: 90799

I saw in September Popular Mechanics an advertisement for this TV antenna.
Do any of you know anything about it? It kind of seems to good to be true. I
have a cabin and would like to buy an antenna for it.
Thanks for your opinions.

1979. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 17:17:49 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <15rUc.198628$tH1.10175716@twister.southeast.rr.com>
Source record: 90801

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:l9nUc.268067$a24.245272@attbi_s03...
> No Richard I am not trolling I am very serious. At the same time I am
always
> wary of any aproach by you
> as the subject always get shifted and then we are off to the races.
> Cecil pointed it out correctly with respect to power. If you were to solve
> a parallel circuit using complex circuit methyods the criteria is energy
> conservation
> but where individual parts change their form of energy s we cannot glibly
> say that it revoves about
> power or that I am referring to perpetual motion which is how Roy
dismisses
> the thread but with no supporting data.
> Now you say that accelleration and decellaration of protons are not the
true
> basis for radiation
> which certainly suggests that the subject is moot as the question starts
off
> with a fallacy.
> Art
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:3tggh01ol4ivlurnu014pl054hf5b6g2dc@4ax.com...
> > On Tue, 17 Aug 2004 03:13:14 GMT, "aunwin@insightbb.com"
> > <aunwin@insightbb.com@insightbb.com> wrote:
> >
> > > Soooooo I am reconciled to the fact
> > >that
> > >there is not enough pertinent knoweledge out there that can allow
> > >reasonable discussion.
> >
> > In otherwords you are trolling.
>
>
While I do not believe you are trolling I can understand why others would
believe you are. I was not certain for a long time. The problem seems to be
a lack of common knowledge between you and those whom you are trying to
converse. To explain to you why you are wrong you first have to be educated
in antenna theory at least to an elementary degree. Unfortunately you tend
to reject the knowledge that other have learned over time, You read and try
to bend facts to fit your own preconceived ideas instead of taking them at
their face value. Frankly trying to explain something to you is so tedious
that most people just give up. If you truly want to learn you should try a

classroom environment. This is the wrong place to get all the information you want starting at the ground up.

1980. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 17:27:36 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <wcrUc.21293$pT5.11027@lakeread05>
Source record: 90800

Why AM?? FM is safe? What frequency is more to the point.
The human body is a very small portion of a wavelength below
1710 kHz, and it would difficult to couple a lot of energy into
one.

Pete

1981. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 17:39:20 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <cprUc.198630$tH1.10177775@twister.southeast.rr.com>
Source record: 90804

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:1wnUc.272613$%_6.270403@attbi_s01...
>
> "Hal Rosser" <hmrosser@bellsouth.net> wrote in message
> news:aAfUc.6730$3I1.3782@bignews5.bellsouth.net...
> > Ok, so the acceleration is in the phase-shifting between the adjacent
> coils
> > ?
> > If I interpret that correctly, then its not a 'real' acceleration, but a
> > simulated acceleration - much like using pulsating DC to generate
> simulated
> > AC.
> Well radiation is certainly a series of "pulses" as the radiation consists
> of enclosed
> waves and yet the speed of generation is constant and only the
constituents
> of total energy
> undergo change. This is how I visualise creation of radiation on a
straight
> element.
> Now we come to a element that is circular. I still see the generation
> of radiation as generated on a strraight radiator but I now see that the
> radiation has a component
> as shown by a added vector as in centrifugal force which because the
> radiator is circular
> is constant. Now I am not proposing a new theory I am asking for a an
> explanation why this is fallacious
> Art
>
> > If you could describe it in terms a normal dummy like myself could
> > understand or at least draw a better picture, your theory may be taken
> more
> > seriously.
> > You say Roy's word is not good enough - But Roy has demonstrated his
> > expertise in this area time and time again.
> > I come here to learn from folks like Roy - and to inject some of my own
> > thoughts from time to time.
>
>
> Don't we all ? But sometimes Roy's words of wisdom does not satisfy the
> questioner
> asks for the underpinnings of the statement. Roy feels an answer from him
is
> all that is required

> as in the word of God and he is not interested in trivialities and may
even
> leave the group for a while
>
> > You come to the group asking for comments - and you got them.
> > You did not speak in terms of technical details - so a reply using
> technical
> > details may not be deserved.
>
> > There is no disgrace in asking questions (like you said) - but rejecting
> > expert opinions can be seen as a disgrace in some instances.
>
>
> I agree but a answer that states it does not obey natures laws if one
cannot
> supply the illustration on how it occurs
> so any request for backup can easily be seen as rejection by some since
the
> words of God have been given>
> >
> > "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
> message
> > news:dJeUc.269797$%_6.33856@attbi_s01...
> > > Hi Hal, nice to meet you
> delete> > What I have is not really a prposition or a legitimate theory,
it
> is just
> > > so
>
>
You will not get a meaningful answer to this because it is not a meanigful
question. It is just techno-babble.
OK if your are trolling have a good laugh on me, You have rattled this
monkey's cage. If not, I feel for you. You have serious problems.

1982. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 17:43:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cftg4u$73o$1@hercules.btinternet.com>
Source record: 90802

Art is obviously a well educated person having the ability to express himself in plain English better than most.

Unfortunately the technical content of his writings are pure gibberish, giving an intelligent reader the impression he is having his leg pulled - or being trolled. I cannot make any sense out of what he says and his reasoning. I gave up trying a long time ago.

As he so frequently admits, he is unable to understand what he himself is talking about.

(Incidentally, Richard, you have Art's characteristics reversed. But the end result is the same - too often I can't understand what it is you are waffling about.)

Art, may I suggest that before you write you think in QUANTITATIVE terms about what you want to say. Put some numbers and physical shape into it. Draw pictures. Solve your own problems. Go back to Ohm's Law and square 1. Otherwise you will continue to think in emotional terms without being able even to visualise, to picture, the subject matter.

Emotions and feelings are not a part of engineering except on pay-day. But the sheer beauty of deriving equations followed by logical calculation, especially when it gives the right answers, is something which no human should be deprived of.

As for Richard, old-man, there's no hope for you. ;o)

Reg

1983. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 17:54:27 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <nDrUc.198632$tH1.10179073@twister.southeast.rr.com>
Source record: 90803

"J999w" <j999w@aol.com> wrote in message
news:20040817091339.14599.00001819@mb-m29.aol.com...
> A ham callsign?
>
> Online info is a good thing, saves you the effort of giving out your
address if
> you want to get a QSL from the bloke you're working.
>
> Why would you want to block your info ... something to hide???
>
> jw
> k9rzz

Sorry about any confusion because of user ID but I was using my daughters computer. Thought I had it set up to give my name. Nothing to hide. Read what you snipped. I was just trying to figure out why I could not get this information on some else who says he has been a ham for a while. I plugged in his call sign in google and did not get the usuall information back from a callsign data base. First time this has happened to me. Was I talking to someone with a bogus call.

1984. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 18:24:18 UTC
From: dplatt@radagast.org
Message-ID: <10i4jaicqs7p9bb@corp.supernews.com>
Source record: 90805

In article <cfsetguma06$1@news.t-online.com>,
Ralf Ballis - DL2MRB <r_ballis@hotmail.com> wrote:

>In this case I would say no one have any information about this call sign on
>his page or there wasn't enough time for search engines to find it.
>Any person who have takes any information about call signs, names, etc. in
>connection of a person in his page and any search engines will be able to
>found this periodical and write it to the database.

I suppose it might be possible to ask Google (and other major search
engines) to suppress lookups for your callsign.

However, anyone who knows how (and it isn't hard) can go to the FCC's
wireless-telecommunications site, and do a search on any FCC license
number (amateur, commercial, GMRS, you name it). As far as I know,
the FCC does not offer a service to conceal the information therein
from public view... and the FCC does provide regular "drops" of this
data to various sights (e.g. ARRL, QRZ, etc.)

My guess is that if you're a licensee, your data is "out there" to be
seen.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1985. Re: Gain measurement

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 18:38:09 UTC
From: Fred Hambrecht Sr - Gilbert News <w4jle@w4jle.com>
Message-ID: <pgsUc.134$Oa6.103@fe39.usenetserver.com>
Source record: 90806

Art, here is the solution to your problem!
http://research.microsoft.com/displayArticle.aspx?id=685
>

1986. Re: Xium TV dish type antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 18:43:32 UTC
From: dplatt@radagast.org
Message-ID: <10i4kekl2avv0a2@corp.supernews.com>
Source record: 90807

In article <n%qUc.312561$JR4.132702@attbi_s54>, Dave <dave@telnet.com> wrote:

>I saw in September Popular Mechanics an advertisement for this TV antenna.
>Do any of you know anything about it? It kind of seems to good to be true. I
>have a cabin and would like to buy an antenna for it.
>Thanks for your opinions.

And, things which seem to be true, usually are.

My guess... looking at a Web-page description of the antenna and its "spilateral" technology, is that it's likely to behave like a compact omnidirectional antenna located in front of a single reflector. The dish is far too small to deliver a significant amount of focusing/gain as a parabolic reflector, at least at the lower VHF frequencies... it's barely a half-wavelength across. You might get a couple of dB of gain (relative to a dipole) but I don't think you'd get more.

Hmmm... in looking at the "goxium.com" web page, I observe that the description of this antenna says that it is "all-directional", compared to a "brand antenna" which is "directional", but the describive blurb claims that "The specially designed 'dish-like' parabolic reflector provides better directional and omni-directional grounding characteristics for ideal center-frequency tuning of local broadcast signals."

So... from what I can see, it's an omni, which means that it has little or no directional gain, which means that it's not well-suited for use in a weak-signal / deep-fringe area, or where multipath reflections from nearby mountains or buildings or trees tend to cause "ghosts" in the picture.

Seems like an expensive solution, compared to an ordinary roof-mount omni antenna having similar directional gain characteristics.

For your situation (I assume "cabin" means "quite a ways away from the city") you'll probably be happiest with a high-gain "deep fringe" VHF/UHF beam antenna (a log-periodic, with a corner-reflector for UHF). Mount it on a mast, as high as is practical. If the stations you want to receive aren't all in the same direction, consider adding a remote-controlled rotator.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1987. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 18:55:03 UTC
From: wa0goz@arrl.net
Message-ID: <41225487.6700@arrl.net>
Source record: 90809

Vito wrote:
>
> All I found was your full name and address.
>
> <wa0goz@arrl.net> wrote
> >
> > PS Try my callsign.

When I Google my callsign I get 334 hits. Try again. Be sure to use Google and not a callbook lookup site.

Henry WA0GOZ

1988. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:01:22 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41225638.5605CF13@shaw.ca>
Source record: 90808

Heavy Hitter wrote:
>
> Is AM Radio Harmful?
> By Stephen Leahy
>
> Story location: http://www.wired.com/news/medtech/0,1286,64579,00.html
>
> 02:00 AM Aug. 16, 2004 PT
>
> Korean scientists have found that regions near AM radio-broadcasting towers
> had....
> Debate continues over the health effects of radio waves from transmitters,
> both large and small, and other forms of electromagnetic fields, including
> power lines and microwaves.

Now that I think of it, my hairloss began sometime around my early
days in ham radio, and has progressed along with my time in the
hobby. Other side effects noted are that, as my friends will vouch,
I have become somewhat crazier, my eyesight is degraded, and my
joints have tightened up somewhat. One of these days I'm gonna
give up hamming... well, maybe! More study will be required.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

1989. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:22:20 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10i4mno6kehp123@corp.supernews.com>
Source record: 90810

Thanks for the silent key notice of W9INN. I never met Bill in person,
but we had several "twisted pair" QSOs over the years. He was a good
Elmer to this old man and I will miss him every time I have a bright
idea about multiband dipoles. I love my W9INN 80-10, and I hope that
the family can keep up the business.

Butch Magee, KF5DE

garigue wrote:

> "Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
> news:aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com...
>
>>The following QST from ARRL makes me sad. I recall working Bill, W9INN,
>>on CW in the early days with my WT7AAN call and was thrilled to say I
>>was using a W9INN 40/80 dipole. His antenna is still in use at my QTH
>>with additional legs added for other bands. Bill was an asset to our
>>hobby and will be missed. I learned a lot about antennas from his
>>detailed instructions provided with each antenna and will always
>>remember the smallest ad in QST from W9INN.
>>
>>Dick, AA5VU
>
>
>
> Nice fellow ...may he rest in peace ....
>
> KI3R Tom Popovic Belle Vernon Pa.
>
>

1990. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:25:50 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10i4mua1mdvk004@corp.supernews.com>
Source record: 90811

I remember too Mac, and they did taste better!

Butch KF5DE

J. McLaughlin wrote:

> ... and I can remember when a coke went from a nickel to a dime. Tasted
> better then too. 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>
> "Tim Perry" <timperryspammenot@adelphia.net> wrote in message
> news:ysidnffUtvBu2b3cRVn-vA@adelphia.com...
>
>>"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
>>news:10huk30c77i8b54@corp.supernews.com...
>>
>>>Looks as if the 100000watts site charges a fee. 73 Mac N8TT
>>>
>>
>>it used to be free... ah well a Coke used to be a dime
>>
>>
>
>

1991. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:39:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k3m4i0d0afc4vg1dh3agf7vb2s5p9g2gig@4ax.com>
Source record: 90812

On Tue, 17 Aug 2004 17:43:58 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

we are to consider:
>Emotions and feelings are not a part of engineering except on pay-day.
contradicted within one sentence by:
>As for Richard, old-man, there's no hope for you. ;o)

At last reckoning, for you blokes on the dole, this isn't pay-day.
You two are ancient enough to have a grudge against Richard III.

Well, that was fun as long as no one cares to talk about serious
radiation questions. ;-)

Or even calibrated mud.... (talk about a lack of QUANTITATIVE terms)

73's
Richard Clark, KB7QHC

1992. Re: Dipole and Icom AH-4

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:43:18 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <cftn4p$1rtc$1@news1.tribune.com>
Source record: 90815

1) Do NOT float the tuner, you will destroy the electronics. Grounding one side of a dipole won't affect it unless you have a low impeadence ground surface and a high impeadence antenna. Even then it will just skew your pattern.

2) I ran an Alinco version of that tuner to balanced line for several years. Worked well (I got the idea from an SGC publication). When I was later changing to a Johnson matchmatch box, I did some A / B comparisons and found that receive signal strength was higher on the Matchbox on some bands than it was on the unbalanced autotuner, but I had to look for the differences.

3) I tried a home made air core 1:1 balun in the line. It tuned but the signal strength was better with out the balun.

4) I fed both dipoles and loops this way.

KA9CAR

"Michael Melland" <w9wis@charter.net> wrote in message
news:10i46v6dvmfff77@corp.supernews.com...
> Anyone feeding a dipole with ladder line feed from an Icom AH-4 ?
>
> I can find articles from people using it with whips and random length
> wires.... but I'd like to feed a dipole with ladder line from it.... one
leg
> to the tuner's ground and the other leg the active tuner output. I think
I
> would be able to float the tuner without a fixed "ground" connection then
> .... the non active leg acts like a counterpoise in a balanced antenna
like
> this right (?).
>
> Mike
>
>
> --
> Michael Melland, W9WIS
> Winneconne, WI USA
> http://webpages.charter.net/w9wis
>
>

1993. Re: NJQRP Squirt 80M antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:46:35 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10i4o57sv2o9rd1@corp.supernews.com>
Source record: 90813

Where may I see a drawing or description of this antenna (the NJQRP).

Thanks,
Butch KF5DE

Theplanters95 wrote:

> From April 2001, QST.
>
> The NJQRP squirt is a 40M dipole with each leg at 34 ft, feed with 300 ohm
> twinlead for use on 80M. I'm thinking of putting one up, but using 450 ohm
> window line going to my trusty Dentron Jr. antenna tuner. How will this
> antenna perform on 75m-6m?
>
> My guess is that since each leg is more than 1/2 wavelength on the bands above
> 20m, it will exhibit some gain. On 40m, it would be a dipole, and according to
> the article, will exhibit about 1 S unit (7.7 DB) with 300 ohmline of loss on
> 75/80m.
>
> I do not have the means to model this antenna. The antenna will be between 10
> and 20 feet high (I'm looking for NVIS for ARES on 75m & 40m). With these
> parameters, will the antenna be ok for DX on the higher bands? Is it an ok
> compromise until I put up a loop antenna? I'm just interested in getting a
> signal out!
>
> Randy ka4nma
>
> you can email me directly at theplanters95NOSPAM@aol.com, after making the
> neccessary correction.

1994. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:46:50 UTC
From: "aunwin@insightbb.com"
Message-ID: <KgtUc.2113$Fg5.1658@attbi_s53>
Source record: 90814

Jimmy I know what the cuurent curve shows on a radiating element and I
suspect that you do also.
Now show me an equivalent current curve for a circle so I can see the
differences in area under the current curve.
Are they different or are they the same?. If you know where such a
comparison is shown and they are different
you are then positioned to inform me why.
By the same token if they are the same which is how most people see it then
I will be better able to
resolve my conundrum for myself.
Art
"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:yvqUc.198625$tH1.10173612@twister.southeast.rr.com...
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:VH6Uc.324209$XM6.205186@attbi_s53...
> > Gentlemen
> > I have in the past alluded not only radiation from a straight element
but
snipNot knowing how you came to your conclusion no one can tell you why you
are
> wrong.. My uncle used to have a paint and body shop with a 57 Chevy up on
a
> pole in front of his shop. While the car would make an awful antenna it
> would be futile to try to explain why. In another way of saying it would
be
> like explaining to a student how he missed a math problem when all he
shows
> is an answer. The best the instructor can do is tell him he is right or
> wrong. In your case the instructor would not even be sure which problem he
> had done.
>
>

1995. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 19:50:31 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cftnmo$o6r$1@newshost.mot.com>
Source record: 90817

Ahhh, what the hell...

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message news:dJeUc.269797$%_6.33856@attbi_s01...

> [...snip...] I was refering to a constant speed
> where the energy input should have transpire3d into acceleration buyt
> instead added another vector that like a race care going round a circular
> circuit. ...

Art,

First, I re-state your basic situation to see if I understand it:

You have a constant speed around a circle. This, indeed does suggest the normal radial acceleration (what is that... V/R^2 ? I don't remember). We know that acceleration is defined as a change in velocity, where velocity consists of both speed and direction. Speed being the distance traveled along a path per unit of time. So, if we change the velocity direction (to always be tangent to the circle) , but not the magnitude (or speed), then we have acceleration - what we call radial acceleration. I believe this all to be true. Are you with me this far and do I have your meaning correctly ?

Assuming the answers are yes, I continue to go into the part about energy "transpiring" into something.

You say:

"the energy input should have transpire3d(sic) into acceleration

buyt(sic) instead added another vector".

This appears to be saying that something (the acceleration) is _not_ produced by said energy ("should have...") , but rather something else _is_ produced ("...another vector").

The words you use in these two parts describe only one thing, yet you imply (by the words: "buyt instead") that they are different things. Radial acceleration is a vector directed toward the center of the circle. It is the 'radial acceleration vector'. Therefore, if your energy _DID_ "transpire" or more correctly, produce this "other vector" then it _DID_ indeed go to produce the acceleration -- because this vector _IS_ the acceleration. They are ways of talking about the same thing. I can't figure out what you mean.

Whether or not it takes energy to cause this circular acceleration is another matter I haven't addressed yet since the basic premises must be cleared up first.

I also think you are wondering if this radial acceleration does some special radiation that is different from the radiation of the charge simply by virtue of its 'normal' non circular movement. However that's also another issue, after we clarify the basics here.

Then you say:

"In both cases we have constant speeds but we also have

a difference in phases. "

You keep mentioning "constant speed" yet we are talking, I thought, about an antenna with RF current in it. If this is the case, there is _NO_ constant speed of the current. It is constantly varying in a sine wave. It has a sinusoidal speed variation and therefore a sinesiodal acceleration (acceleration being the derivative of velocity and cosine being the derivative of sine) So you seem to be applying two concepts (constant speed and . sinusoidal variation in speed) in one situation. I believe this is invalid and may be the source of your confusion.

Also, I don't know where this "phases" comes from. Lost me here unless you are talking about the relative phase of two different windings of this circular wire you mentioned a while ago...

Please explain what I have wrong, if the case.

> Enough said. I have typed up the program [...snip...]

What language are you programming in and what formulas are you using ?

Steve N.
--
Steve N, K,9;d, c. i My email has no u's.

1996. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 20:06:07 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnci4p9f.2o85.bit-bucket@shell.config.com>
Source record: 90816

On Tue, 17 Aug 2004 17:54:27 GMT, Jimmie hath writ:
>
> "J999w" <j999w@aol.com> wrote in message
> news:20040817091339.14599.00001819@mb-m29.aol.com...
>> A ham callsign?
>>
>> Online info is a good thing, saves you the effort of giving out your
>> address if you want to get a QSL from the bloke you're working.
>>
>> Why would you want to block your info ... something to hide???
>
> Sorry about any confusion because of user ID but I was using my daughters
> computer. Thought I had it set up to give my name. Nothing to hide. Read
> what you snipped. I was just trying to figure out why I could not get this
> information on some else who says he has been a ham for a while. I plugged
> in his call sign in google and did not get the usuall information back from
> a callsign data base. First time this has happened to me.

> Was I talking to someone with a bogus call.
Question mark?

Try this:
http://www.qrz.com/detail/XNZZZ
^^^^^...inserting the callsign.

If the reply is "The callsign XNZZZ was not found on our server.", then
the callsign was either never issued or expired A LONG TIME AGO.

Elsewise, just entering the callsign in Google will only reflect how
"busy" the op is on the web, in usenet, ... and/or in contests.
(I find my call often in contest logs that folks feel a need to post
on web sites....) I'm sure there are some grizzled olde (active)
op's that have never owned or used a computer (not even a Commodore 64),
and whose existance could not be proven by Google. (Google usually
does not index the pages given up by other "look-up" engines such as
QRZ.COM and BUCK.COM.)

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

1997. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 20:31:38 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <4122698c.1063548328@news.galilei.com>
Source record: 90818

Hi Henry

Can I ask a disassociated question concerning Search Engines?

If so, here is my question.

Most ISP subscribers have a home page usually named Index.html from this page they place links to their other pages stored at the website.

OK, Google can find all of these no problem.

But, if you place pages on the website that are not linked to your Index page that requires the person accessing your web site area to know the word or name to type behind the actual URL to get to this hidden web page, can Google find that page?

The reason I ask is that I have certain pages that are accessable only to those who need to know and know what to type behind the URL to get them to come up.
To the best of my knowledge, none of these hidden pages (not linked to the Index page) have ever been picked up by Google.
Naturally these types of pages bring up the directory instead of the home page if you click the back button, but the directory only shows a link to parent directory and clicking on that automatically brings up the index page, so the directory showing the hidden files supposedly cannot be seen.

How safe is this method?
And can Google find it?

TTUL
Gary

1998. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 20:35:34 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <hup4i0lcs1j7ec7gh6bmguheag23o683jq@4ax.com>
Source record: 90819

On Tue, 17 Aug 2004 15:50:05 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>However, as to the statement above, and the presumptions that follow,
>there is no equilibrium to observe as the test implementation has been
>described. You are pouring calories into an insulated environment
>which can only raise temperature without end (short of destruction, of
>course).
>
>As I described elsewhere, this is called a caloric bomb, and as such
>should be limited in time for all comparisons.

You seem to assume that no thermal power will flow through the
styrofoam walls of the box.

Your statement is true if you insert a huge amount of power into the
box, in which case the temperature would climb, until the styrofoam
would melt. However, the measurement can be done at much lower power
levels that are compatible with the thermal conductivity of the
styrofoam.

If styrofoam would be an ideal isolator, you could put some deep
freeze food into a styrofoam box, move to your summer cottage and hope
that the food would still be eatable after a week. Unfortunately this
is not true :-(.

When doing antenna efficiency measurements, the power levels should be
set to a level, in which the temperature increase is manageable (below
the melting point of the styrofoam).

To give an example of the power levels required, assume that
you insert a 1 kg (1 liter) bottle of drink at 0 C into the test
container and after 10000 seconds (about 3 hours) the drink
temperature is at +10 C, the energy needed is about 40 kJ, thus the
leakage through the container walls would be about 4 W. With the
outside temperature of 20 C, the average temperature difference would
be 15 C and the thermal conductivity about 4 C/W. This is what you
usually get with some power transistors with a heat sink :-).

If you build an igloo around the "miracle" antenna, you should be able
to measure the heat generated (and thus efficiency) with power levels
well below the legal limit in most countries and with bad antennas
10-100 W should be enough.

Of course, you should make sure that the styrofoam own RF dissipation
is sufficiently small at the test frequency.

Paul OH3LWR

1999. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 20:43:42 UTC
From: Rob <roblitespeed@hotmail.com>
Message-ID: <26uUc.1710$xS2.1534@newssvr24.news.prodigy.com>
Source record: 90820
Body handling: HTML body converted to readable text

"Gary V. Deutschmann, Sr." wrote in message
news:4122698c.1063548328@news.galilei.com...
> Hi Henry
>
> Can I ask a disassociated question concerning Search Engines?
>
> If so, here is my question.
>
> Most ISP subscribers have a home page usually named Index.html from
> this page they place links to their other pages stored at the website.
>
> OK, Google can find all of these no problem.
>
> But, if you place pages on the website that are not linked to your
> Index page that requires the person accessing your web site area to
> know the word or name to type behind the actual URL to get to this
> hidden web page, can Google find that page?
>
> The reason I ask is that I have certain pages that are accessable only
> to those who need to know and know what to type behind the URL to get
> them to come up.
> To the best of my knowledge, none of these hidden pages (not linked to
> the Index page) have ever been picked up by Google.
> Naturally these types of pages bring up the directory instead of the
> home page if you click the back button, but the directory only shows a
> link to parent directory and clicking on that automatically brings up
> the index page, so the directory showing the hidden files supposedly
> cannot be seen.
>
> How safe is this method?
> And can Google find it?
>
> TTUL
> Gary
>
Generally Google or other search engines will not find pages that are not
linked. You can make sure that Google doesn't list it even if it does find
it by putting between the
tags.
Rob

2000. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 20:53:43 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040817165343.16860.00002156@mb-m20.aol.com>
Source record: 90721

OH3LWR:
>
>Of course that is what everyone would want to measure, but unless you
>are working in the millimeter bands in a non-echoic chamber,
>determining the true (absolute) radiation pattern can be quite
>problematic.

We are looking at shortened, loaded verticals, monopoles. So you stick the "standard" - quarter wave radiator in the test point, measure it at proper point, then you replace it with "miracle" antenna and do the same, feeding them with the same power. The difference is in overall efficiency. Lets not lose sight of what are we talking about and what the real "problem" is.
How do you build igloo for 4 square? Comon guys, this is old stuff, has been done for 100 years already. Lets not fly off on tangents.
Is anyone out there who "calorimetered" the antenna?

Yuri, K3BU

2001. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 21:01:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10i4sgmrch2lcbd@corp.supernews.com>
Source record: 90722

Yes, the temperature will rise until the rate of heat leaving the container equals the power (rate of energy) entering the box. As the interior of the box gets hotter (more exactly, as the inside-outside temperature differential increases), heat exiting the box will increase. So at some internal temperature an equilibrium will be reached. You'd want to use a power level high enough to make this temperature well above ambient so that small variations in ambient temperature won't badly skew the results, but low enough that you don't cook the box's innards.

The method you propose seems workable, except I didn't see any mention of heat leaving the box via thermal conduction along the wires. Depending on the box's insulating property and the wires, this could be a significant contributor to the total heat loss from the box. Therefore it's very important to either insure that this loss is negligible compared to the loss through the styrofoam, or else to manage it (most easily by using exactly the same wires and wire orientation during calibration and test).

As I mentioned earlier, it's probably within the means of an amateur to make useful measurements, but it would take a lot of care and attention to detail. There may well be other factors none of us have considered (as examples, the presence of variable drafts in the vicinity of the box, which could impact the heat transfer rate in a major way, or nonlinearity of convective cooling), so measurements of various bodies of known dissipation would have to be measured to confirm that all significant factors are accounted for before there will be any confidence in the results.

Roy Lewallen, W7EL

Paul Keinanen wrote:

> On Tue, 17 Aug 2004 15:50:05 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
>
>>However, as to the statement above, and the presumptions that follow,
>>there is no equilibrium to observe as the test implementation has been
>>described. You are pouring calories into an insulated environment
>>which can only raise temperature without end (short of destruction, of
>>course).
>>
>>As I described elsewhere, this is called a caloric bomb, and as such
>>should be limited in time for all comparisons.
>

>
> You seem to assume that no thermal power will flow through the
> styrofoam walls of the box.
>
> Your statement is true if you insert a huge amount of power into the
> box, in which case the temperature would climb, until the styrofoam
> would melt. However, the measurement can be done at much lower power
> levels that are compatible with the thermal conductivity of the
> styrofoam.
>
> If styrofoam would be an ideal isolator, you could put some deep
> freeze food into a styrofoam box, move to your summer cottage and hope
> that the food would still be eatable after a week. Unfortunately this
> is not true :-(.
>
> When doing antenna efficiency measurements, the power levels should be
> set to a level, in which the temperature increase is manageable (below
> the melting point of the styrofoam).
>
> To give an example of the power levels required, assume that
> you insert a 1 kg (1 liter) bottle of drink at 0 C into the test
> container and after 10000 seconds (about 3 hours) the drink
> temperature is at +10 C, the energy needed is about 40 kJ, thus the
> leakage through the container walls would be about 4 W. With the
> outside temperature of 20 C, the average temperature difference would
> be 15 C and the thermal conductivity about 4 C/W. This is what you
> usually get with some power transistors with a heat sink :-).
>
> If you build an igloo around the "miracle" antenna, you should be able
> to measure the heat generated (and thus efficiency) with power levels
> well below the legal limit in most countries and with bad antennas
> 10-100 W should be enough.
>
> Of course, you should make sure that the styrofoam own RF dissipation
> is sufficiently small at the test frequency.
>
> Paul OH3LWR
>

2002. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 21:03:20 UTC
From: kashe@sonic.net
Message-ID: <mks4i0pv932i7ubkrsif0eiaejgqf3r8cn@4ax.com>
Source record: 90723

On 17 Aug 2004 13:13:39 GMT, j999w@aol.com (J999w) wrote:

>A ham callsign?
>
>Online info is a good thing, saves you the effort of giving out your address if
>you want to get a QSL from the bloke you're working.
>
>Why would you want to block your info ... something to hide???
>
>jw
>k9rzz

Do you have your employer send your paycheck as a postcard
form so everyone can see it? How about test results from your
proctologist/brain surgeon?

2003. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 21:13:38 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <6yuUc.25845$9Y6.2105@newsread1.news.pas.earthlink.net>
Source record: 90724

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:VH6Uc.324209$XM6.205186@attbi_s53...
> Gentlemen
> I have in the past alluded not only radiation from a straight element but
> also the ADDITION of radiation
> occuring from a bent element.
deletia.....
> Thanks in advance
> Art
>
>
Art
There is radiation due to the acceleration of bending a current, it's called
synchrotron radiation.
Synchrotron radiation and amateur radio have little or nothing to do with
one another.
Take elementary school science and report back.
73
H.

2004. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 22:02:29 UTC
From: JAlves <notjalves_02360@yahoospam.com>
Message-ID: <h-ednaHtcN7rHb_cRVn-rg@adelphia.com>
Source record: 90725

In article <uLiUc.198596$tH1.10149043@twister.southeast.rr.com>,
"Sarah Fender" <Sfender@carolina.rr.com> wrote:

> Is ther anyway you cna prevent your call sign from being looked up on the
> internet. I ask because when I google my call sign all the expected info is
> found but when I google someone elses(just one call) I find nothing to their
> idenity. IS it possible to block this information?

Actually, your call sign is a matter of public record. Anybody can go
to one of several sites that allow you to look-up call signs. ARRL's
site does it. You can probably do it at the FCC's site.
Jeff

--
Please reply to the group, not by email. The email address in the
header is not valid unless you remove the obvious.

2005. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 22:09:43 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-974BFD.17094617082004@newssvr22-ext.news.prodigy.com>
Source record: 90726

Butch,

The full ARRL blurb said something about the daughter sending refunds
to back orders that the business is closed. I did not save the full
text.

Dick, aa5vu

In article <10i4mno6kehp123@corp.supernews.com>,
Butch <lynyrd@cableone.net> wrote:

> Thanks for the silent key notice of W9INN. I never met Bill in person,
> but we had several "twisted pair" QSOs over the years. He was a good
> Elmer to this old man and I will miss him every time I have a bright
> idea about multiband dipoles. I love my W9INN 80-10, and I hope that
> the family can keep up the business.
>
> Butch Magee, KF5DE
>
> garigue wrote:
>
> > "Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
> > news:aa5vuNOSPAM-2C37F5.08001814082004@newssvr24-ext.news.prodigy.com...
> > >
> > >>The following QST from ARRL makes me sad. I recall working Bill, W9INN,
> > >>on CW in the early days with my WT7AAN call and was thrilled to say I
> > >>was using a W9INN 40/80 dipole. His antenna is still in use at my QTH
> > >>with additional legs added for other bands. Bill was an asset to our
> > >>hobby and will be missed. I learned a lot about antennas from his
> > >>detailed instructions provided with each antenna and will always
> > >>remember the smallest ad in QST from W9INN.
> > >>
> > >>Dick, AA5VU

2006. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 22:29:26 UTC
From: N2EY@AOL.COM
Message-ID: <c2356669.0408171354.32a5a227@posting.google.com>
Source record: 90727

Heavy Hitter <echostar@thaimail.org> wrote in message
news:<NWgUc.26223$SC1.15602@nwrddc03.gnilink.net>...
> Is AM Radio Harmful?
> By Stephen Leahy
>
> Story location: http://www.wired.com/news/medtech/0,1286,64579,00.html
>
> 02:00 AM Aug. 16, 2004 PT
>
> Korean scientists have found that regions near AM radio-broadcasting towers
> had 70 percent more leukemia deaths than those without.

Do they define "near"? How do they control for other factors? Do they
look at many diseases or just a few?
>
> The study, to be published in an upcoming issue of the International
> Archives of Occupational and Environmental Health, also found that cancer
> deaths were 29 percent higher near such transmitters.

Same questions. How much does, say, smoking increase the cancer risk?

> Two years ago an Italian study found death rates from leukemia increased
> dramatically for residents living within two miles of Vatican Radio's
> powerful array of transmitters in Rome.

How dramatically? 10 times? 100 times?

> The Koreans looked at the death rates in 10 regions with AM
> radio-transmitting towers broadcasting at more than 100 kilowatts and
> compared them with control areas without transmitters. The substantially
> higher cancer mortality in those who lived within two kilometers of the
> towers led researchers to conclude that more investigation was needed.

Of course more is needed.
>
> However, they also said their study did not prove a direct link between
> cancer and the transmitters.

Indeed!
>
> "There have been many studies like these, and they aren't very convincing,"
> said Mary McBride, an epidemiologist at the British Columbia Cancer Agency.
> Many other factors could have contributed to those cancer rates, said
> McBride, who has headed a number of similar studies and found no direct
> link.
>

Which means they didn't have a big enough study, nor adequate control group.

> Equally important is that studies in the lab don't show how radio waves can
> produce cancers, she said.
>
> Debate continues over the health effects of radio waves from transmitters,
> both large and small, and other forms of electromagnetic fields, including
> power lines and microwaves.
>
> Sam Milham, a Seattle-based epidemiologist and a pioneer in
> electromagnetic-field research, is convinced there are health effects.
> "Lots of research papers from around the world show increased cancers near
> transmitters, although TV and FM transmitters are more often implicated."

Implicated but not proved. Have controlled animal studies been done? I think not.

> Moreover, many lab studies show low-frequency EMF disrupt living cells,
> Milham asserts. Critics like McBride say such results are often difficult
> to reproduce at other labs. Milham says that's because of differences in
> the Earth's magnetic field and stray EMF.

We're all sitting in 500 milligauss field from the planet...

> In an attempt to settle some of this, California's Department of Health
> Services reviewed all the current studies of EMF risks from power lines,
> wiring and appliances in 2002. It found no conclusive evidence of harm.
> However, links to childhood leukemia, adult brain cancer and Lou Gehrig's
> disease could not be ruled out.

Of course they cannot be ruled out because you cannot prove a negative.

> "I'm convinced that politics and corporate interests are behind denials
> (that say) there are no health effects," said Milham.

Nobody who understands science says there are no health effects. What they do say is that no health effects have been scientifically demonstrated. BIG difference.

> Meanwhile, the FDA and the World Health Organization are urging more
> studies, especially of radio waves from cell phones.

A good idea - if they are real scientific studies.

Some years back, there was a "study" done on cause-of-death of hams reported in the Silent Key column of QST. Researcher looked up the cause of death for a pretty large number of West Coast hams, and found somewhat higher frequency of death from certain cancers and leukemias. There was quite a buzz about it.

I did some digging and found a *bunch* of holes in the study:

- it compared West Coast hams to the general population, not to the West Coast population

- it looked only at hams reported in the SK column of QST

- it did not compensate for differences in age, occupation, or other environment factors like smoking that would have a big influence on disease. Nor did it research what sort of hamming the amateur did, or for how long. (The ham who did a little QRP for a few years as a senior citizen got as much weight in the study as the ham who'd run high power since teenage years and worked his entire career at a broadcast station, etc.)

- it found only minor elevations in the named diseases

- (this is the biggie) it found that there were some cancers and leukemias that were *less common* causes of death in the studied group. That little factoid was conveniently ignored in most media reports

- Most of all, the study repeatedly stated that it was not conclusive and that much more work needed to be done.

But we rarely hear "the rest of the story"..

73 de Jim, N2EY

2007. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 23:27:02 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <7vwUc.43012$n7.42401@fe37.usenetserver.com>
Source record: 90728

The more I listen to AM radio, the more I list to the right when I walk.....

"N2EY" <N2EY@AOL.COM> wrote in message
news:c2356669.0408171354.32a5a227@posting.google.com...
> Heavy Hitter <echostar@thaimail.org> wrote in message
> news:<NWgUc.26223$SC1.15602@nwrddc03.gnilink.net>...
>> Is AM Radio Harmful?
>> By Stephen Leahy
>>
>> Story location: http://www.wired.com/news/medtech/0,1286,64579,00.html
>>
>> 02:00 AM Aug. 16, 2004 PT
>>
>> Korean scientists have found that regions near AM radio-broadcasting
>> towers
>> had 70 percent more leukemia deaths than those without.
>
> Do they define "near"? How do they control for other factors? Do they
> look at many diseases or just a few?
>>
>> The study, to be published in an upcoming issue of the International
>> Archives of Occupational and Environmental Health, also found that cancer
>> deaths were 29 percent higher near such transmitters.
>
> Same questions. How much does, say, smoking increase the cancer risk?
>
>> Two years ago an Italian study found death rates from leukemia increased
>> dramatically for residents living within two miles of Vatican Radio's
>> powerful array of transmitters in Rome.
>
> How dramatically? 10 times? 100 times?
>
>> The Koreans looked at the death rates in 10 regions with AM
>> radio-transmitting towers broadcasting at more than 100 kilowatts and
>> compared them with control areas without transmitters. The substantially
>> higher cancer mortality in those who lived within two kilometers of the
>> towers led researchers to conclude that more investigation was needed.
>
> Of course more is needed.
>>
>> However, they also said their study did not prove a direct link between
>> cancer and the transmitters.
>
> Indeed!

>>
>> "There have been many studies like these, and they aren't very
>> convincing,"
>> said Mary McBride, an epidemiologist at the British Columbia Cancer
>> Agency.
>> Many other factors could have contributed to those cancer rates, said
>> McBride, who has headed a number of similar studies and found no direct
>> link.
>>
> Which means they didn't have a big enough study, nor adequate control
> group.
>
>> Equally important is that studies in the lab don't show how radio waves
>> can
>> produce cancers, she said.
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>> Debate continues over the health effects of radio waves from
>> transmitters,
>> both large and small, and other forms of electromagnetic fields,
>> including
>> power lines and microwaves.
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>> Sam Milham, a Seattle-based epidemiologist and a pioneer in
>> electromagnetic-field research, is convinced there are health effects.
>> "Lots of research papers from around the world show increased cancers
>> near
>> transmitters, although TV and FM transmitters are more often implicated."
>
> Implicated but not proved. Have controlled animal studies been done? I
> think not.
>
>> Moreover, many lab studies show low-frequency EMF disrupt living cells,
>> Milham asserts. Critics like McBride say such results are often difficult
>> to reproduce at other labs. Milham says that's because of differences in
>> the Earth's magnetic field and stray EMF.
>
> We're all sitting in 500 milligauss field from the planet...
>
>> In an attempt to settle some of this, California's Department of Health
>> Services reviewed all the current studies of EMF risks from power lines,
>> wiring and appliances in 2002. It found no conclusive evidence of harm.
>> However, links to childhood leukemia, adult brain cancer and Lou Gehrig's
>> disease could not be ruled out.
>
> Of course they cannot be ruled out because you cannot prove a
> negative.
>
>> "I'm convinced that politics and corporate interests are behind denials
>> (that say) there are no health effects," said Milham.
>

> Nobody who understands science says there are no health effects. What
> they do say is that no health effects have been scientifically
> demonstrated. BIG difference.
>
>> Meanwhile, the FDA and the World Health Organization are urging more
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> A good idea - if they are real scientific studies.
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> reported in the Silent Key column of QST. Researcher looked up the
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> somewhat higher frequency of death from certain cancers and leukemias.
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> West Coast population
>
> - it looked only at hams reported in the SK column of QST
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> - it did not compensate for differences in age, occupation, or other
> environment factors like smoking that would have a big influence on
> disease. Nor did it research what sort of hamming the amateur did, or
> for how long. (The ham who did a little QRP for a few years as a
> senior citizen got as much weight in the study as the ham who'd run
> high power since teenage years and worked his entire career at a
> broadcast station, etc.)
>
> - it found only minor elevations in the named diseases
>
> - (this is the biggie) it found that there were some cancers and
> leukemias that were *less common* causes of death in the studied
> group. That little factoid was conveniently ignored in most media
> reports
>
> - Most of all, the study repeatedly stated that it was not conclusive
> and that much more work needed to be done.
>
> But we rarely hear "the rest of the story"..
>
> 73 de Jim, N2EY

2008. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 23:41:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ck55i096t2ma8mtn88llcqduge06058vb5@4ax.com>
Source record: 90729

On 17 Aug 2004 15:29:26 -0700, N2EY@AOL.COM (N2EY) wrote:

>Same questions. How much does, say, smoking increase the cancer risk?

Hi Jim,

That's simple. If you live close enough to the tower to start
smoking, then you have got one hell of a risk.

73's
Richard Clark, KB7QHC

2009. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-17 23:52:09 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10i56fiatdl1sd2@corp.supernews.com>
Source record: 90730

Dear Butch and Cecil;
It is good to get confirmation of such events from long ago.
Somehow, I also associate the year that it happened as being the year
when a postal card went from one cent to two cents. The new postal card
had a red square "stamp."
Anyone remember what year that would have been?
Oh. Even then, I was keen on antennas and radio. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net
"Butch" <lynyrd@cableone.net> wrote in message
news:10i4mua1mdvk004@corp.supernews.com...
> I remember too Mac, and they did taste better!
>
> Butch KF5DE
>
> J. McLaughlin wrote:
>
> > ... and I can remember when a coke went from a nickel to a dime.
Tasted
> > better then too. 73 Mac N8TT
> >
> > --
> > J. Mc Laughlin - Michigan USA
> > Home: JCM@Power-Net.Net
> >
>

2010. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 00:13:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ll75i05hkagfaak3e6ingsorpp4qjc82i9@4ax.com>
Source record: 90731

On Tue, 17 Aug 2004 19:52:09 -0400, "J. McLaughlin"
<JCM@Power-Net.Net> wrote:

> Anyone remember what year that would have been?

The year Ben Franklin was postmaster?

73's
Richard Clark, KB7QHC

2011. Re: NJQRP Squirt 80M antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 00:14:00 UTC
From: Mac <vk2evb@hotmail.com>
Message-ID: <41233a07$0$27222$61ce578d@news.syd.swiftdsl.com.au>
Source record: 90742

I found this antenna to work very well on QRP. 34ft either side, inverted V at 30ft high and 45ft 300 ohm slotted ribbon is what I used as per the article. On 7mhz and above it worked VERY well and 3.5mhz was a little down but still very useable. I was using 5 watts or less, CW, RTTY, PSK & SSB. I now have it rolled up ready for portable work as I have more room for larger antenna now. Of course results depend on location but excellent performance for what it is.

73 Peter VK2EVB
"Theplanters95" <theplanters95@aol.comnospam> wrote in message news:20040817014556.23098.00003683@mb-m07.aol.com...
> From April 2001, QST.
>
> The NJQRP squirt is a 40M dipole with each leg at 34 ft, feed with 300 ohm
> twinlead for use on 80M. I'm thinking of putting one up, but using 450
> ohm
> window line going to my trusty Dentron Jr. antenna tuner. How will this
> antenna perform on 75m-6m?
>
> My guess is that since each leg is more than 1/2 wavelength on the bands
> above
> 20m, it will exhibit some gain. On 40m, it would be a dipole, and
> according to
> the article, will exhibit about 1 S unit (7.7 DB) with 300 ohmline of loss
> on
> 75/80m.
>
> I do not have the means to model this antenna. The antenna will be
> between 10
> and 20 feet high (I'm looking for NVIS for ARES on 75m & 40m). With these
> parameters, will the antenna be ok for DX on the higher bands? Is it an
> ok
> compromise until I put up a loop antenna? I'm just interested in getting a
> signal out!
>
> Randy ka4nma
>
> you can email me directly at theplanters95NOSPAM@aol.com, after making the
> neccessary correction.

2012. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 00:18:01 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnci581p.2kra.bit-bucket@shell.config.com>
Source record: 90732
Body handling: HTML body converted to readable text

On Tue, 17 Aug 2004 20:43:42 GMT, Rob hath writ:
>
> "Gary V. Deutschmann, Sr." wrote in message
> news:4122698c.1063548328@news.galilei.com...
>> Hi Henry
>>
>> Can I ask a disassociated question concerning Search Engines?
>>
>> If so, here is my question.
>>
>> Most ISP subscribers have a home page usually named Index.html from
>> this page they place links to their other pages stored at the website.
>>
>> OK, Google can find all of these no problem.
>>
>> But, if you place pages on the website that are not linked to your
>> Index page that requires the person accessing your web site area to
>> know the word or name to type behind the actual URL to get to this
>> hidden web page, can Google find that page?
>>
>> The reason I ask is that I have certain pages that are accessable only
>> to those who need to know and know what to type behind the URL to get
>> them to come up.
>> To the best of my knowledge, none of these hidden pages (not linked to
>> the Index page) have ever been picked up by Google.
>> Naturally these types of pages bring up the directory instead of the
>> home page if you click the back button, but the directory only shows a
>> link to parent directory and clicking on that automatically brings up
>> the index page, so the directory showing the hidden files supposedly
>> cannot be seen.
>>
>> How safe is this method?
>> And can Google find it?
>>
>> TTUL
>> Gary
>>
> Generally Google or other search engines will not find pages that are not
> linked. You can make sure that Google doesn't list it even if it does find
> it by putting between the
> tags.
> Rob

However, scumbag crackers will continue to probe around in websites --
looking for any un-linked pages you may have. And, neither robots.txt,
nor will deter them.
Lately I've seen *concerted* probing efforts in my cgi-bin directory --
for things like contact.cgi, eforms.cgi, kontakt.pl, order.cgi, u.s.w.
All 'live' scripts found at _other_ web sites no doubt. (I've already
honey-potted the 'usual' scripts -- such as formmail.pl)

You can use .htaccess to restrict access to _just_ those ip's that you
wish to have access to the web pages. .htaccess is a server-side
control that the crackers can't (well, can't easily....) get around.

I use .htaccess and deep(er), totally bizzare sub-directory names to
try to prevent cracker access to some things. Of course, you need
to turn off directory indexing, too. And, avoid IIS...

But, what do/did either of these topics have to do with antennas?

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2013. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 00:21:07 UTC
From: "aunwin@insightbb.com"
Message-ID: <ThxUc.3767$Fg5.1828@attbi_s53>
Source record: 90733

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:cftnmo$o6r$1@newshost.mot.com...
> Ahhh, what the hell...
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:dJeUc.269797$%_6.33856@attbi_s01...
>
> > [...snip...] I was refering to a constant speed
> > where the energy input should have transpire3d into acceleration buyt
> > instead added another vector that like a race care going round a
circular
> > circuit. ...
>
>
>
> Art,
>
> First, I re-state your basic situation to see if I understand it:
>
> You have a constant speed around a circle.
Yes

This, indeed does suggest the
> normal radial acceleration (what is that... V/R^2 ? I don't remember).
Yes

We
> know that acceleration is defined as a change in velocity, where velocity
> consists of both speed and direction.
yes
Speed being the distance traveled
> along a path per unit of time
yes
. So, if we change the velocity direction (to
> always be tangent to the circle) , but not the magnitude (or speed), then
we
> have acceleration - what we call radial acceleration.

Not sure if I follow that.with respect to terms If what I said is what you
are saying
AOK

In the case of circular course constant speed energy must be inputed
to overcome radial force and ofcourse every action has an equal and opposite

reaction
I believe this all to
> be true. Are you with me this far and do I have your meaning correctly ?
It would appear so subject to my statements above
It would apear that it is so
>
>
>
> Assuming the answers are yes, I continue to go into the part about energy
> "transpiring" into something.
>
o.k.>
>
> You say:
>
> "the energy input should have transpire3d(sic) into acceleration
>
> buyt(sic) instead added another vector".
>
>
>
> This appears to be saying that something (the acceleration) is _not_
> produced by said energy ("should have...") , but rather something else
_is_
> produced ("...another vector").

I am saying that energy is inputed to maintain constant speed which can be
seen
as creating a CONSTANT force vector at a tangent

>
> The words you use in these two parts describe only one thing, yet you
> imply (by the words: "buyt instead") that they are different things.
Yes because when the radiator is straight it is phase change that creates
cyclic
current change ala accelleration.
In the case of a circular radiator I understand that there is no phase
change
a nd the radiation vector is a constant. This may well be the nubb of the
misunderstanding.

Radial
> acceleration is a vector directed toward the center of the circle. It
is
> the 'radial acceleration vector'. Therefore, if your energy _DID_
> "transpire" or more correctly, produce this "other vector" then it _DID_
> indeed go to produce the acceleration -- because this vector _IS_ the
> acceleration. They are ways of talking about the same thing. I can't
> figure out what you mean.
>
>

>
> Whether or not it takes energy to cause this circular acceleration is
> another matter I haven't addressed yet since the basic premises must be
> cleared up first.
>
> I also think you are wondering if this radial acceleration does some
> special radiation that is different from the radiation of the charge
simply
> by virtue of its 'normal' non circular movement. However that's also
> another issue, after we clarify the basics here.
That is correct in that current variation is constant in one case and cyclic
in the other
which inferes that over a cycle the area under the cyclic current curve is
the same as that seen
under a constant curren and it is this comparison that I was looking for in
literature.
>
>
>
> Then you say:
>
> "In both cases we have constant speeds but we also have
>
> a difference in phases. "
Yes I see the phase change as shown by the current curve.
and in the case of circular motion I do not see a phase change (I cos phi)
>
>
>
> You keep mentioning "constant speed" yet we are talking, I thought,
> about an antenna with RF current in it.

Yes

If this is the case, there is _NO_
> constant speed of the current. It is constantly varying in a sine wave.
> It has a sinusoidal speed variation and therefore a sinesiodal
acceleration
> (acceleration being the derivative of velocity and cosine being the
> derivative of sine)

Yes I agree. That would be of the value I cos phi with cos phi providing the
sign wave
I believe we are saying the same thing

So you seem to be applying two concepts (constant
> speed and . sinusoidal variation in speed) in one situation. I
believe
> this is invalid and may be the source of your confusion.

It may well be a difference of terms applied but I am pleased you follow
the main drift of what I was saying so you could be well armed to

correct me where I was wrong.
>
>
>
> Also, I don't know where this "phases" comes from. Lost me here
unless
> you are talking about the relative phase of two different windings of this
> circular wire you mentioned a while ago...
>
No that was in reference to the new model antenna that I am making>
>
> Please explain what I have wrong, if the case.
>
>
>
>
>
> > Enough said. I have typed up the program [...snip...]
>
>
>
> What language are you programming in and what formulas are you using ?
>
Steve it is a computor program that chooses or finds the best dimension for
an inputed variable.
plus can handle a large number of segments''''''
I have many circular radiators in a horizontal position but at different
heights.
All have a gap in the circle and half are wound in an opposite direction to
the other coils.
All of these loops are connected to each other by vertical members the
length of which depends
on the cosequtive height of the loops... These vertical portions become high
voltage and low current member
when requiring best efficiency. The impotant thing in this arrangement is
the correct selection of the up
then down positions of the loops for the feed input requirements.
You cannot research the best positions of the loops with Roy's program as it
is the basic of basics and
posibly not enough segments available but most programs of today DO offer
many variable dimensions
with more than enough segments (I used 20 segments for each loop)
I am very pleased that you connected the dots of my question which shows I
am not a troll.
My spelling is bad because this new computor has small letters on the screen
and with a
3 Gig Hz speed it is difficult to keep up to speed with a braille keyboard
Hi, Hi.
My very best regards to you and thanks for hanging in there as opposed to a
derogatory comment

Art.
AS
>
> Steve N.
> --
> Steve N, K,9;d, c. i My email has no u's.
>
>

2014. Re: NJQRP Squirt 80M antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 00:27:09 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040817202709.23168.00003869@mb-m07.aol.com>
Source record: 90734

It is in the April 2001 QST and also on the arrl web site www.arrl.org/tis.

Randy

2015. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 01:46:03 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4122b4db$0$74195$39cecf19@news.twtelecom.net>
Source record: 90735

You are, of course, joking. Why wouldn't you want an antenna that
handles at least that? 200 watts is low power on VHF and up for many of us.

I would expect any fixed antenna system I use on 6 or 2 to handle full
legal limit, and 70cm to handle 500 watts minimum. I will admit you
normally wouldn't use vertical polarization with that much power, but I
still want my antenna/feed systems to handle it without a problem.

tom
K0TAR

Paul Jordan wrote:
> I guess my question would be... WHY do you need 200 watts on 2 meters or
> 440mhz for that matter??
>
> Hal Rosser wrote:
>
>> I would be very tempted to try a discone in this case - just to say I
>> made
>> one.
>> practically no gain - but I hear they have extremely good bandwidth - and
>> different enough to start interesting QSOs locally
>>
>>
>>
>> "Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
>> news:10huuo8a91fkn72@corp.supernews.com...
>>
>>> Does anybody have any good ideas for a good dual band
>>> 2 meter/440 antenna? This would be a base antenna and
>>> should be capable of handling 200 watts.
>>>
>>>
>>> Thanks
>>>
>>>
>>> Chip
>>
>>
>>
>>
>> ---
>> Outgoing mail is certified Virus Free.
>> Checked by AVG anti-virus system (http://www.grisoft.com).
>> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

>>
>>

2016. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 02:13:18 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10i5eoa7o0p9ga4@corp.supernews.com>
Source record: 90736

Possibly.
However, it seems that from about 1873 'till January 1, 1952 the rate
was one cent. 73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ll75i05hkagfaak3e6ingsorpp4qjc82i9@4ax.com...
> On Tue, 17 Aug 2004 19:52:09 -0400, "J. McLaughlin"
> <JCM@Power-Net.Net> wrote:
>
> > Anyone remember what year that would have been?
>
> The year Ben Franklin was postmaster?
>
> 73's
> Richard Clark, KB7QHC

2017. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 05:55:33 UTC
From: kashe@sonic.net
Message-ID: <gqr5i09q6pv9v9k71d5lb5j0pb495g5odc@4ax.com>
Source record: 90737

On Tue, 17 Aug 2004 19:27:02 -0400, "Jim Leder" <k8cxm@hotmail.com>
wrote:

>The more I listen to AM radio, the more I list to the right when I walk.....

Yes, but do you list to the right when you vote? :-)

>
>
>
>"N2EY" <N2EY@AOL.COM> wrote in message
>news:c2356669.0408171354.32a5a227@posting.google.com...
>> Heavy Hitter <echostar@thaimail.org> wrote in message
>> news:<NWgUc.26223$SC1.15602@nwrddc03.gnilink.net>...
>>> Is AM Radio Harmful?
>>> By Stephen Leahy
>>>
>>> Story location: http://www.wired.com/news/medtech/0,1286,64579,00.html
>>>
>>> 02:00 AM Aug. 16, 2004 PT
>>>
>>> Korean scientists have found that regions near AM radio-broadcasting
>>> towers
>>> had 70 percent more leukemia deaths than those without.
>>
>> Do they define "near"? How do they control for other factors? Do they
>> look at many diseases or just a few?
>>>
>>> The study, to be published in an upcoming issue of the International
>>> Archives of Occupational and Environmental Health, also found that cancer
>>> deaths were 29 percent higher near such transmitters.
>>
>> Same questions. How much does, say, smoking increase the cancer risk?
>>
>>> Two years ago an Italian study found death rates from leukemia increased
>>> dramatically for residents living within two miles of Vatican Radio's
>>> powerful array of transmitters in Rome.
>>
>> How dramatically? 10 times? 100 times?
>>
>>> The Koreans looked at the death rates in 10 regions with AM
>>> radio-transmitting towers broadcasting at more than 100 kilowatts and
>>> compared them with control areas without transmitters. The substantially
>>> higher cancer mortality in those who lived within two kilometers of the
>>> towers led researchers to conclude that more investigation was needed.

>>
>> Of course more is needed.
>>>
>>> However, they also said their study did not prove a direct link between
>>> cancer and the transmitters.
>>
>> Indeed!
>>>
>>> "There have been many studies like these, and they aren't very
>>> convincing,"
>>> said Mary McBride, an epidemiologist at the British Columbia Cancer
>>> Agency.
>>> Many other factors could have contributed to those cancer rates, said
>>> McBride, who has headed a number of similar studies and found no direct
>>> link.
>>>
>> Which means they didn't have a big enough study, nor adequate control
>> group.
>>
>>> Equally important is that studies in the lab don't show how radio waves
>>> can
>>> produce cancers, she said.
>>>
>>> Debate continues over the health effects of radio waves from
>>> transmitters,
>>> both large and small, and other forms of electromagnetic fields,
>>> including
>>> power lines and microwaves.
>>>
>>> Sam Milham, a Seattle-based epidemiologist and a pioneer in
>>> electromagnetic-field research, is convinced there are health effects.
>>> "Lots of research papers from around the world show increased cancers
>>> near
>>> transmitters, although TV and FM transmitters are more often implicated."
>>
>> Implicated but not proved. Have controlled animal studies been done? I
>> think not.
>>
>>> Moreover, many lab studies show low-frequency EMF disrupt living cells,
>>> Milham asserts. Critics like McBride say such results are often difficult
>>> to reproduce at other labs. Milham says that's because of differences in
>>> the Earth's magnetic field and stray EMF.
>>
>> We're all sitting in 500 milligauss field from the planet...
>>
>>> In an attempt to settle some of this, California's Department of Health
>>> Services reviewed all the current studies of EMF risks from power lines,
>>> wiring and appliances in 2002. It found no conclusive evidence of harm.
>>> However, links to childhood leukemia, adult brain cancer and Lou Gehrig's
>>> disease could not be ruled out.

>>
>> Of course they cannot be ruled out because you cannot prove a
>> negative.
>>
>>> "I'm convinced that politics and corporate interests are behind denials
>>> (that say) there are no health effects," said Milham.
>>
>> Nobody who understands science says there are no health effects. What
>> they do say is that no health effects have been scientifically
>> demonstrated. BIG difference.
>>
>>> Meanwhile, the FDA and the World Health Organization are urging more
>>> studies, especially of radio waves from cell phones.
>>
>> A good idea - if they are real scientific studies.
>>
>> Some years back, there was a "study" done on cause-of-death of hams
>> reported in the Silent Key column of QST. Researcher looked up the
>> cause of death for a pretty large number of West Coast hams, and found
>> somewhat higher frequency of death from certain cancers and leukemias.
>> There was quite a buzz about it.
>>
>> I did some digging and found a *bunch* of holes in the study:
>>
>> - it compared West Coast hams to the general population, not to the
>> West Coast population
>>
>> - it looked only at hams reported in the SK column of QST
>>
>> - it did not compensate for differences in age, occupation, or other
>> environment factors like smoking that would have a big influence on
>> disease. Nor did it research what sort of hamming the amateur did, or
>> for how long. (The ham who did a little QRP for a few years as a
>> senior citizen got as much weight in the study as the ham who'd run
>> high power since teenage years and worked his entire career at a
>> broadcast station, etc.)
>>
>> - it found only minor elevations in the named diseases
>>
>> - (this is the biggie) it found that there were some cancers and
>> leukemias that were *less common* causes of death in the studied
>> group. That little factoid was conveniently ignored in most media
>> reports
>>
>> - Most of all, the study repeatedly stated that it was not conclusive
>> and that much more work needed to be done.
>>
>> But we rarely hear "the rest of the story"..
>>
>> 73 de Jim, N2EY

>
>

2018. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 06:11:35 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <otr5i01f4eqo0bd21t2dsncj26moqi14ln@4ax.com>
Source record: 90738

On Tue, 17 Aug 2004 14:01:06 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>The method you propose seems workable, except I didn't see any mention
>of heat leaving the box via thermal conduction along the wires.
>Depending on the box's insulating property and the wires, this could be
>a significant contributor to the total heat loss from the box. Therefore
>it's very important to either insure that this loss is negligible
>compared to the loss through the styrofoam, or else to manage it (most
>easily by using exactly the same wires and wire orientation during
>calibration and test).

In my original post I suggested using the same container and the same
cable to feed either the antenna or the dummy load. Thus the power
escaping through the feedline is the same in both cases and thus,
cancels out.

My suggestion of using a cold liquid and measuring how long it takes
until it gets warmer just helps to give a ballpark value of the
thermal conductivity, which will help to set the appropriate power
levels for the actual antenna/dymmy load tests, i.e. not too cold or
too warm.

Paul OH3LWR

2019. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 06:17:27 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <10i5t809nqh217a@corp.supernews.com>
Source record: 90739

No, I'm not joking at all.. We use repeaters here in Alaska that are on nice tall mountains all over the state. Check out the Arctic Amateur Radio Club repeater page sometime. Thier repeaters system has over 60,000 square miles of coverage.. I can access any of thier repeaters with a 5 watt handheld. My Icom 706 only has 10 watts on 2 meters and I've never had a problem with reception or transmission into a repeater.

I guess we're just not into the long distance contacts you outsiders like to do down there in the lower 48.

What's funny is, you can work satellites and space shuttles with 5 watts and a hand held Yagi... I still can't see the need for all that power on 2 meters.. I guess if I need to reach out farther, I go HF..

That's what makes this hobby so interesting though, we all have different interests.

Tom Ring wrote:
> You are, of course, joking. Why wouldn't you want an antenna that
> handles at least that? 200 watts is low power on VHF and up for many of
> us.
>
> I would expect any fixed antenna system I use on 6 or 2 to handle full
> legal limit, and 70cm to handle 500 watts minimum. I will admit you
> normally wouldn't use vertical polarization with that much power, but I
> still want my antenna/feed systems to handle it without a problem.
>
> tom
> K0TAR
>
> Paul Jordan wrote:
>
>> I guess my question would be... WHY do you need 200 watts on 2 meters
>> or 440mhz for that matter??
>>
>> Hal Rosser wrote:
>>
>>> I would be very tempted to try a discone in this case - just to say I
>>> made
>>> one.
>>> practically no gain - but I hear they have extremely good bandwidth -
>>> and
>>> different enough to start interesting QSOs locally
>>>
>>>

>>>
>>> "Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
>>> news:10huuo8a91fkn72@corp.supernews.com...
>>>
>>>> Does anybody have any good ideas for a good dual band
>>>> 2 meter/440 antenna? This would be a base antenna and
>>>> should be capable of handling 200 watts.
>>>>
>>>>
>>>> Thanks
>>>>
>>>>
>>>> Chip
>>>
>>>
>>>
>>>
>>>
>>> ---
>>> Outgoing mail is certified Virus Free.
>>> Checked by AVG anti-virus system (http://www.grisoft.com).
>>> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>>>
>>>

2020. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 06:57:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <oru5i09kctf0ln586mlkav60a0ti2rgm52@4ax.com>
Source record: 90740

On Tue, 17 Aug 2004 22:13:18 -0400, "J. McLaughlin"
<JCM@Power-Net.Net> wrote:

>Possibly.
>However, it seems that from about 1873 'till January 1, 1952 the rate
>was one cent. 73 Mac N8TT

Hi Mac,

It must've been quite an expense initially, later a bargain.

Let's see, all within reach I have some QSL cards from the mid 60's.
One from WLW at 4 cents, WCBS for a nickel, One from K7UGA also a
nickel and one from K4LIB, one from CBC for 3 cents Canadian, and a
post card with several cancellations marked Hamburg, Innsbruck, and
New York for One Cent (cancellations 1887) with an extra One Cent
stamp (for international?).

K7UGA would be livid with the crop of candy-ass, pansy republicans
that inhabit the hill these days.

73's
Richard Clark, KB7QHC

2021. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 10:12:38 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <K6SdnUdT0MYKtr7cRVn-qQ@gwi.net>
Source record: 90741
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

>>
>>Hi Doug,
>>
>>I'm Running the Windom (OFCD) it identical to what your saying. but
>>you'll find that the coax needs to come off the antenna in pretty much a
>>90 degree angle. ohterwise you will end up with lots of fedline
>>radiation which will cause problems in the shack.
>>73 Dave kc1di
>
>
> Can you give me an indication about how long a lead I need before
> running the coax back toward the house and into the radio? I'm going
> to run the coax up the house and out to the feedpoint.
>
> Doug

Hi again Doug,

Was out of town so did not get your question for a few days.

You should run it away from the antenna at 90 degrees for about 1/4 wave
if possible. on 80M that would be about 66 ft. but as far as you can
in any event. some claim choke balun at 22' down the feedline works
well Mine is about 30' then a choke balun then about 75' to the shack
and it seem to work for me.
73 Dave

2022. Re: Dipole and Icom AH-4

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 13:39:10 UTC
From: Chuck <nospam@nospam.net>
Message-ID: <2_IUc.25555$nx2.11414@newsread2.news.atl.earthlink.net>
Source record: 90743

Hi Mike,

How did you plan to float the tuner? It would
probably be grounded through the coax shield and
possibly through the dc power ground, wouldn't it?

Chuck

Michael Melland wrote:
> Anyone feeding a dipole with ladder line feed from an Icom AH-4 ?
>
> I can find articles from people using it with whips and random length
> wires.... but I'd like to feed a dipole with ladder line from it.... one leg
> to the tuner's ground and the other leg the active tuner output. I think I
> would be able to float the tuner without a fixed "ground" connection then
> .... the non active leg acts like a counterpoise in a balanced antenna like
> this right (?).
>
> Mike
>
>
> --
> Michael Melland, W9WIS
> Winneconne, WI USA
> http://webpages.charter.net/w9wis
>
>

2023. ICOM R-71A For Sale

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 13:54:04 UTC
From: afink@rmi.net
Message-ID: <b913b99e.0408180554.5ad1eb8e@posting.google.com>
Source record: 90744
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.misc

Mid-'80's ICOM R71A for sale. Recently removed from sailboat as I am looking for RX/TX capability and this SSB is RX only. It works. It shows no outward signs of any abuse. It comes with owner's manual and some schematics. No AC power cord.

Since anyone interested in such a machine knows its value, I'll ask that you simply make me an offer that will satisfy both of us.

Al Fink
KC0MCW
Denver, CO
afink@rmi.net
303-377-1528

2024. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 14:04:37 UTC
From: Vito <vito@crosslink.net>
Message-ID: <412361f6$0$4535@dingus.crosslink.net>
Source record: 90745

QRO is fine if you live in a thick rain forest and can't get your antenna up over the treetops, or if you're using Morse or SSB to set a new distance record, but otherwise, otherwise. Before PL tones became SOP my main VHF/UHF problem was pulling up multiple repeaters with anything over 50 watts and even that was too much on some frequencies, so I learned to strictly limit my power output. Nowdays most repeaters have PL tones that prevent unwanted activation BUT using enough power to trigger them with the tone means I'd be interfering with QSOs on them even with the PL off. If I come up with a 100 watt signal, sans PL, but some OM close to the repeater keys it up with a HT, my RF and voice is going to QRM his. Thats why my VHF/UHF amps have gathered dust for over 10 years and my primary VHF/UHF rig is a VX-2R.

73, K3DWW

"Tom Ring" <news0000@taring.org> wrote in message
news:4122b4db$0$74195$39cecf19@news.twtelecom.net...
> 200 watts is low power on VHF and up for many of us.

2025. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 14:12:48 UTC
From: Vito <vito@crosslink.net>
Message-ID: <412363e1$0$4536@dingus.crosslink.net>
Source record: 90746

YES! AM can be almost as harmful as cocaine. I got addicted to 6 meter AM back about 1978. Spent almost a year trying to make a local net using an ancient kit somebody had cobbed together. It had some special need sensor that allowed it to work FB until it was my turn to check in then nothing .... til the net was over. Drove me to kicking the dog!

Oh! You meant PHYSICAL harm. Sorry .....

2026. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 14:28:27 UTC
From: Karl Beckman <Karl.Beckman@motorola.com>
Message-ID: <cfvp2d$6m4$1@engnntp1.cig.mot.com>
Source record: 90749

I recall that postcards had "just gone up" to 2 cents when I started
kindegarten in 1954. Same time frame that Ohio started their temporary
sales tax of 1%, which is up to 8% now but still "temporary."

--
Karl Beckman, P.E.
Motorola CGISS

"Quality is never an accident, it is always the result of high
intention, sincere effort, intelligent direction and skillful
execution; it represents the wise choice of many alternatives"

"J. McLaughlin" <JCM@Power-Net.Net> wrote in message
news:10i56fiatdl1sd2@corp.supernews.com...
> Dear Butch and Cecil;
> It is good to get confirmation of such events from long ago.
> Somehow, I also associate the year that it happened as being the year
> when a postal card went from one cent to two cents. The new postal card
> had a red square "stamp."
> Anyone remember what year that would have been?
> Oh. Even then, I was keen on antennas and radio. 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
> "Butch" <lynyrd@cableone.net> wrote in message
> news:10i4mua1mdvk004@corp.supernews.com...
> > I remember too Mac, and they did taste better!
> >
> > Butch KF5DE
> >
> > J. McLaughlin wrote:
> >
> > > ... and I can remember when a coke went from a nickel to a dime.
> Tasted
> > > better then too. 73 Mac N8TT
> > >
> > > --
> > > J. Mc Laughlin - Michigan USA
> > > Home: JCM@Power-Net.Net
> > >
> >
>

2027. Lopp antenna Question-Re-Post

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 14:51:38 UTC
From: nospam_deepsea_77@yahoo.com
Message-ID: <41236cc5.1102255@news1.news.adelphia.net>
Source record: 90747

Questions on this antenna:

No takers the first time, so re-post:

==========

http://www.pcug.org.au/~prellis/amateur/space-miser-80m.html

1. Think this will stand 150 watts AM? That 300 ohm twinlead looks a little fragile for a capacitor...

2. How critical is the actual ratio of length to height? Seems to indicate a length of about 23-24 ft (upper end of band), and I only have about a 20 ft run to work with...making the height a bit taller... so the whole thing might come out a bit taller and a bit narrower, once it was hung.

Thanks to the group in advance,

Lin/KJ6EF
For email responses, remove "nospam_".

2028. Re: _Loop_ antenna Question-Re-Post

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 14:55:20 UTC
From: nospam_deepsea_77@yahoo.com
Message-ID: <41236d94.1310191@news1.news.adelphia.net>
Source record: 90748

Sorry, folks...that should have been "Loop"...never post before the
2nd cup of coffee...
For email responses, remove "nospam_".

2029. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 15:24:36 UTC
From: William Mutch <wcm1@NOSPAM.cornell.edu>
Message-ID: <MPG.1b8d3ebe7d9c18a59897bc@newsstand.cit.cornell.edu>
Source record: 90750

In article <95a201e0.0408161011.452626ee@posting.google.com>,
n1jpr@hotmail.com says...
> I have a low-power 4:1 toroid balun almost ready in a little plastic
> box. In order to keep the rain out, I am sealing everything up, but I
> am also considering space-filling materials.
>
> I am leaning toward filling it with hot "wax" - actually, paraffin
> from standard household candles, although a harder grade like
> sometimes found in old military equipment should be better.
>
> The pro should be that the box would not become sealed for eternity in
> case I want to re-wire something in the future, while epoxy is bomb
> proof, and urethane foam is also rather hard to remove.
>
> Is there any electrical con to be considered?
>
I've used bees wax and it has worked fine, though I have no way to
measure losses, if any. You can melt it to get your toroid free if you
need to. I have done this when wanting to put the same balun on
different feedlines.

2030. Re: Lopp antenna Question-Re-Post

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 15:28:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <p1t6i092nnns2lrm45u8gobgcromnl26jk@4ax.com>
Source record: 90751

On Wed, 18 Aug 2004 14:51:38 GMT, nospam_deepsea_77@yahoo.com (Space Charge) wrote:

>Questions on this antenna:
>http://www.pcug.org.au/~prellis/amateur/space-miser-80m.html

Hi Lin,

This is one that you could easily model with the free version of EZNEC. It won't answer the robustness of the twin line cap, but presumably the author of this design had already put that to the fire.

As for its description, nothing seems out of the ordinary.

73's
Richard Clark, KB7QHC

2031. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 15:54:29 UTC
From: gmz79@aol.comnospam
Message-ID: <20040818115429.16791.00002780@mb-m20.aol.com>
Source record: 90752

It's Location,location,location.
My primary QTH antenna is HAAT + 50ft
5 Watts into a j-pole does fine for most machines < 75 miles.
At my fishing cabin HAAT - 75ft it takes 100Watts
into a 10el Cushcraft to get the same working
radius. Elevation is everthing.

Greg
WG8Z
Greg Z
to thine own sound be true
WG8Z

2032. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 16:02:15 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrnci6vc7.2ehd.bit-bucket@shell.config.com>
Source record: 90753

On Wed, 18 Aug 2004 06:57:50 GMT, Richard Clark hath writ:
>
> K7UGA would be livid with the crop of candy-ass, pansy republicans
> that inhabit the hill these days.

It'll be enough that the voters that will
show up at the polls in November are livid.

2033. EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 16:44:57 UTC
From: JerryB <slim@hotmail.com>
Message-ID: <bd17i0d0fl79aub4u7ufo7ri14qascjcdn@4ax.com>
Source record: 90754

I just started playing with EZNEC and am modeling an Inverted V for 20 meters with the lowest SWR at 14.1mhz up about 25 feet. Angle will be 90 degrees. My figures show that each leg to be a little over 17 feet long. Doesn't seem correct to me. Could someone plug my figures in and tell me if I'm right or wrong. I would appreciate it.

Thanks

2034. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 17:55:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rr57i0pmc4ge5m0jeofgqg1m9vij3q4ke9@4ax.com>
Source record: 90755

On Wed, 18 Aug 2004 11:44:57 -0500, JerryB <slim@hotmail.com> wrote:

>My figures show that each leg to be a little over 17 feet
>long. Doesn't seem correct to me.

Hi Jerry,

Trust your tool, or give a reason why it doesn't seem correct.

73's
Richard Clark, KB7QHC

2035. Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 18:47:24 UTC
From: DGoncz@aol.com
Message-ID: <5d8971ea.0408181047.3d836ccb@posting.google.com>
Source record: 90756

Hello, fellow radio amateurs!

I am unlicensed and do not transmit except I send guitar voice mail on the phone and also I send the guitar through FRS for fun.

With twenty feet of twinax from IEC, I am now able to receive WHFS in stereo from Annapolis, MD, here in Seven Corners, VA reliably. We'll see if it works at night.

Both the antenna and 1/8 stereo phone plug terminations need work, but are working.

Could any of you tell me where I can buy some pretinned 1/8 stereo phone plugs with metal sheilded barrels? The ones I buy at Radio Shack don't tin well with rosin flux and a fresh tip, using 60/40 solder. I have to scrape them to bare metal and heat them so much the plastic insulators soften a little. At these frequencies, that matters. Yes, I replaced the polyethylene between the legs with hot melt. Of course I did. But still, see below, there are refinements.

I don't know what engineer at Wizard decided to run their dipole antenna in through a phone jack. Fer cryin' out loud, was it just because the line output is a phone jack and they couldn't spare two cents? What a hassle.

What a nice radio, now it's done. I will get the serial port version soon and have a free slot for a second OEM IBM speakerphone modem. But that's another story.

By using the VU meter on my Cool Edit, I was able to point the antenna. I braced it off the ceiling with a cigarette pack and a strip of double sided foam adhesive tape, then tapped it with a wooden paddle to move it about a degree at a time. It's not an RF meter, but it does get an optimal result. T and I will switch positions next time, so I can interpret the varying audio levels during transmission as indicators of reception quality. Variability was over 30 db. I'll provide a better estimate when we swap positions. I was the one moving the antenna this time.

The transmission line hangs straight from the ceiling to the floor, tensioning the twin leads to form an air spaced graduated line. If you stand too close to it, the signal fades, even though it is sheilded. I guess I need a good ground. This is twin wire in this older apartment, not properly grounded. I can go up then rightwards into the heat pump box and terminate to a ground there. No, not the Freon pipe, there will be a proper ground there and I will find it. I've got the long bit already. Best would be to replace the hard corner on the plaster

wall, burying the ground leading up from the baseboard behind it, or to groove the face of the wall and bury the ground there. Yes, I know that isn't to code.

Anyway, if you know where to buy a good quality, readily tinned phone jack, please let me know. Likewise, if my soldering technique sounds off, please, reply. If you know already through experience that Radio Shack is not the place to go, let me know that and I'll visit Arlington Electronic Wholesalers for a quality product. They are only a bike ride away.

I'll give the details of the terminations later, once, as they are, then again, after I've optimized them. I've got five extra feet of cable so there's room to play with terminations at both ends.

God, I love new, local music.

Yours,

Doug Goncz
Replikon Research
Seven Corners, VA

2036. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 18:52:43 UTC
From: JerryB <slim@hotmail.com>
Message-ID: <b497i0pr61ivb4kf4l17ekspt1cur10osd@4ax.com>
Source record: 90757

Thanks for the reply. I had seen formulas for dipoles using 468/FMhz
and the V's were always 2 to 5% shorter, which would make the V about
16 foot per leg. But I guess that's not taking height and angle into
consideration. I'm learing so guess I have more to do. Thanks again.

Jerry

On Wed, 18 Aug 2004 17:55:30 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Wed, 18 Aug 2004 11:44:57 -0500, JerryB <slim@hotmail.com> wrote:
>
>>My figures show that each leg to be a little over 17 feet
>>long. Doesn't seem correct to me.
>
>Hi Jerry,
>
>Trust your tool, or give a reason why it doesn't seem correct.
>
>73's
>Richard Clark, KB7QHC

2037. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 19:24:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qga7i0dtn874tqprq44asflc64hno6cr83@4ax.com>
Source record: 90758

On Wed, 18 Aug 2004 13:52:43 -0500, JerryB <slim@hotmail.com> wrote:

>Thanks for the reply. I had seen formulas for dipoles using 468/FMhz
>and the V's were always 2 to 5% shorter, which would make the V about
>16 foot per leg. But I guess that's not taking height and angle into
>consideration. I'm learing so guess I have more to do. Thanks again.

Hi Jerry,

At best, such formulas are a starting point, and one should always cut the wire LONGER than any solution offers.. This is so that you can trim it to accommodate local variations in geology, topography, interfering trees and houses and the world in general.

Modeling programs attempt to anticipate a myriad of complications, such as your height and angle variables to aid in construction. Also, modeling programs attempt to portray the consequences of building your antenna by providing matching information and launch characteristics so that you can vary elements and observe the impact of your actions before you start building.

This is all relative of course. Your back yard may not conform to the model's expectations, and you would then experience a divergence from your own expectations of performance. However, even in this regard you have a basis of comparison. You can vary the model's settings (generally this reflects a poor choice of ground type or wire size or its insulation) to conform to your reality, and then alter the model to what your desired characteristics and be relatively assured that changing your physical model in a similar manner will result in greater success.

73's
Richard Clark, KB7QHC

2038. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 19:25:48 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cg0akf$85a$1@newshost.mot.com>
Source record: 90761

[... snipping all the agreed to parts so far...Sorry, but all the history is
just too much﷒not to mention what follows! ﷒. . . . .]

ALSO, ART. PLEASE do something to make your responses obvious in the body
of text, like line spaces, or lots of asterisks or something so I can find
your responses.

***** maybe like this

Also, you can use a word processor to compose these messages and get the
benefit of a spel chek. Hi hi , I am right now, then Cut & Paste into your
news-reader.

On to the topic﷒

Steve said:

> >So, if we change the velocity direction (to
> > always be tangent to the circle) , but not

> > the magnitude (or speed), then we
> > have acceleration - what we call radial acceleration.

Art:
> Not sure if I follow that.

Steve: I am only describing what it takes to get motion around a circle.
It is basic physics. I'll try saying it several other ways:

The "thing" which represents the acceleration that is causing
the movement in a circle _IS_ a vector pointing toward the center of the
circle. The object is being accelerated toward the center of its orbit.
Its acceleration _IS_ directed at the center.

Another way to say it is; "In order to get the thing to travel
in a circle, you must accelerate it toward the center of said circle and
this acceleration is caused by a constant force toward the center and can be
represented by a vector pointing toward the center.

Good old F = MA is also a vector equation. That is, it can be
used to account for the direction of forces and accelerations. If the force
is in a given direction, then the acceleration is also in that same
direction. (a logical conclusion is that the acceleration is also changing
in order to remain pointing at the center as the thing moves around the
circle)

It appears that you call the acceleration one thing and the
vector another, but they are the same thing, not two different things. So

it appears to me that you are trying to make the vector something else, or
something new to get some new effect. This is where I am confused as to
just what you are thinking is the effect.

[...skipping ahead, some, but basically repeating in new terms ...]

> ART:
> I am saying that energy is inputed to maintain constant speed which can be
> seen as creating a CONSTANT force vector at a tangent

Steve: Yes, (in _uniform_, or constant circular motion) it takes a
constant inward force to get the constant inward acceleration which results
in the constant circular motion. HOWEVER, I have a SERIOUS problem with this
word "CONSTANT" in this context I address below.

Steve: Moving away from the basics of uniform circular motion and on to RF
in a wire.

ART:
> Yes because when the radiator is straight it is phase change that creates
> cyclic current change ala accelleration.

Steve: OK, so we are back to this electron flow in a straight wire
following the sinewave in current, or "cyclic current change ", to use your
terms. Sure.

I don't under your cause and your effect here because I do not
understand what it is that you refer to when you use the words "phase
change".

It is the _generator_ (or transmitter) which is causing the
current and all the acceleration(s)...many per second. The generator
produces EMF or voltages which alternately drive current first one way, then
the other, in this sine wave fashion along the wire. EMF (Electro Motive
Force) is call this because it acts like a force to move electrons (causing
current) in the wire. It is this force which causes the accelerations and
motions.

The generator accelerates the electrons, not what you call "phase change"--I
don't know what this means. There is a change in _current_ over time, but
NOT phase.

Art:

> In the case of a circular radiator I understand that there is no phase
> change a nd the radiation vector is a constant. This may well be the nubb
of the
> misunderstanding.

Steve: I think there is a definite nubb here! You appear to have jumped
to DC away from RF. We should be talking about the SAME type of varying
current, therefore there is still the sinewave form of current flow, the
same accelerations. We do have an added velocity change around the circle,
but we haven't taken away the sinewave of current

Steve: I also think you are wondering if this radial acceleration does
some
> > special radiation that is different from the radiation of the charge
> simply

ART:

> That is correct in that current variation is constant in one case and
cyclic
> in the other

Steve: First, I wouldn't use phrases like "current variation is
constant". Either there is a variation, or it is constant. This phrase
implies that something is varying in a very repeatable or constant manner,
like a sine wave or square wave or triangle wave.

To answer the content of this comment, most emphatically NO! There is
always the cyclic, sinewave variation in current when you bend a current
carrying conductor into a circle. The AC sine wave doesn't go away.

Steve: I skip the area under the curve comment and continue with comments
on your cosine reference.> >

ART:
> Yes I see the phase change as shown by the current curve.

Steve You gotta drop this "phase change" phrase. I think you simply mean
the voltage change over time, meaning the sine wave of current that is a
given in this situation.

ART:
> and in the case of circular motion I do not see a phase change (I cos
phi)

Ahhhh! OK, perhaps this direction will help. Lets talk about your
formula

>>> I COS(phi) which is, of course I*COS(phi).

This formula gives the current at any _instant in time_ when you
plug-in that value of time. However, "phi" is NOT one number. This is
actually I*COS(wt) that's omega times "t". This is the formula, or
mathematical function of the sinewave of an AC signal of constant
frequency just what we are talking about.

This is "I", which is the peak magnitude of the current under
discussion, times the cosine of the angle given by multiplying the frequency
(omega) by the present value of time Which is CONSTANTLY INCREASING as
time progresses! This means that the current is constantly changing. If
you plot these values versus time on a graph, you see our friend the sine
wave and the tops and bottoms are exactly "I" high (away from zero).

Steve:
> > You keep mentioning "constant speed" yet we are talking, I thought,
> > about an antenna with RF current in it.

ART: Yes

STEVE: > If this is the case, there is _NO_
> > constant speed of the current. It is constantly varying in a sine
wave.
> > It has a sinusoidal speed variation and therefore a sinusoidal
> acceleration

> Yes I agree. That would be of the value I cos phi with cos phi providing
the
> sign wave. I believe we are saying the same thing

STEVE:

Then I am unable to understand where you are going. I see nothing new (
in regards to the basic physics above) created by the antenna being in a
circle. We just have AC flowing in a circle.

Some of the problem is your un conventional use of the terminology which
makes the transfer of the underlying concepts & ideas difficult. It is ok
to not be formally schooled in a subject. You can be what we call
"self-educated", but you must learn to use the terminology in he correct
ways (according to the way the vast majority of us use it) or you won't be
able to make yourself understood or understand others. Like I tell my
students, you MUST learn the terminology and use it correctly--- while in
both cases your head may really hurt, there is a world of difference between
a headache and a subdural hematoma!

ART: It may well be a difference of terms applied but I am pleased you
follow
> the main drift of what I was saying so you could be well armed to
> correct me where I was wrong.

Steve:

You go on to describe what seems to be an antenna composed of several large
horizontal, circular, or perhaps better described as helical, elements
stacked one above another, where some are wound in right-hand sense and
others in left-hand sense. I'll not go there because I believe you are
looking for some kind of a new phenomenon which is the result of this
arrangement. This may sound elitist, but I believe you are trying to
discover new physical principles with limited knowledge of the physical
world. It appears to me that your limited knowledge and ability to put
concepts to words leads you to believe there is a magic bullet just waiting
to be stumbled upon and that you can do it.

Antennas, past the simple dipole (although the basics of radiation is a
great source of confusion in itself) get complex really fast. A firm
understanding of how the currents in all parts of an antenna cause remote
fields that superimpose to cause the total, resulting field is critical to
being able to devise new and improved antennas, if they exist.

Go ahead and have fun modeling antennas. See what comes out of various
configurations. I recommend starting out simple to give yourself some

understanding of 'what' causes 'what'. Using this, build a model in your brain (one that suits you) which ALWAYS explains all the observer phenomena as you move along. Your model must NEVER violate any laws of physics or fundamental principles which are known to be true. All this must also make sense or "fit" when viewed with all other fundamental concepts, but understand that much will be mysterious to you without this understanding.

I applaud your desire to learn and experiment, while I am sad that you have insufficient background preventing you from seeing some of the real beauty of the natural phenomena we call electronics.

> My very best regards to you and thanks for hanging in there as opposed to a
> derogatory comment
> Art.

It saddens me when I read some of what is posted. Hams are generally a very friendly lot, but the Internet (UseNet in particular) somehow releases the evil in some. We all have our weaker moments. Some of us are just a lot closer to them than others. All I can do is a Tsk, Tsk and move on.

I must lead my life to a higher standard&#65533; It's a dirty job, but somebody's got to do it.

Some people go to church and then cut you off and swear at you in traffic. I don't do either any more.

73, Steve

2039. Reflector - reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 19:37:34 UTC
From: Ken Luther <sparkzz@aol.com>
Message-ID: <kfOUc.442$UZ4.105@bignews3.bellsouth.net>
Source record: 90759

Hello,

Dumb question for all of the experts:

In a beam antenna, such as a Yagi, Quad, Hexbeam, Moxon square, etc
what purpose does the REFLECTOR server during RECEIVE???
Does it enhance the received signal any at all, or, in the case of a quad,
are you receiving only as if you only had a vertical loop antenna??

thanks & 73's
Ken
KD5ZCL

2040. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 19:47:04 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cg0bsb$8d5$1@newshost.mot.com>
Source record: 90762

Yikes! Your brain surgeon is a proctologist ? !

Sorry, couldn't resist.
--
Steve N, K,9;d, c. i My email has no u's.
<kashe@sonic.net> wrote in message
news:mks4i0pv932i7ubkrsif0eiaejgqf3r8cn@4ax.com...
> On 17 Aug 2004 13:13:39 GMT, j999w@aol.com (J999w) wrote:
>
> >A ham callsign?
> >
> >Online info is a good thing, saves you the effort of giving out your
address if
> >you want to get a QSL from the bloke you're working.
> >
> >Why would you want to block your info ... something to hide???
> >
> >jw
> >k9rzz
>
> Do you have your employer send your paycheck as a postcard
> form so everyone can see it? How about test results from your
> proctologist/brain surgeon?
>

2041. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 19:50:55 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cg0c3i$8dt$1@newshost.mot.com>
Source record: 90763

I list from top to bottom.

"Jim Leder" <k8cxm@hotmail.com> wrote in message
news:7vwUc.43012$n7.42401@fe37.usenetserver.com...
> The more I listen to AM radio, the more I list to the right when I
walk.....
>
>
>

2042. Re: Reflector - reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 20:00:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mmc7i0t73t5iqp6p8c9112blqj6ttt07a2@4ax.com>
Source record: 90760

On Wed, 18 Aug 2004 14:37:34 -0500, "Ken Luther" <sparkzz@aol.com>
wrote:

>what purpose does the REFLECTOR server during RECEIVE???

Hi Ken,

Antennas work the same in both directions, so to speak. The reflector
and directors offer the same benefits to both receive and transmit.
In a sense they distort the medium around them to present variations
in phase such that they add/subtract in a convergence with the
"driven" element. They are the optical equivalent of lens elements in
a complex lens which aid in correcting aberrations and
enhancing/increasing magnification.

In isolation, the reflector for a receiver acts as a shield blocking
signals arriving from behind the reflector. The success of that
blocking action is not complete, but through spacing with the driven
element can produce a range of responses which are offset by other
considerations (like matching impedance) varying along with those
changes.

73's
Richard Clark, KB7QHC

2043. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 20:57:58 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cg0fsmpvt1@hercules.btinternet.com>
Source record: 90764

There's a small program named INV_VEE available from website below.

It will tell you immediately all you wish to know about interactions between wire lengths, height above ground, apex-angle between 0 and 180 degrees, wire-size, feeder loss, SWR, radiating efficiency, etc., of any inverted-V at any fequency.

It won't tell you much about its radiation pattern but that's already a simple, well known property of the popular inverted-V. For practical purposes, at ordinary apex angles, it is omni-directional and fairly low-angle as EZNEC is designed to show you.

Download INV_VEE in a few seconds and run immediately. Good DX-ing with it.

Free to USA citizens.

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

2044. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 21:03:20 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <xjSwFxWYQ8IBFAKe@ifwtech.co.uk>
Source record: 90765

Richard Clark wrote:
>On Wed, 18 Aug 2004 13:52:43 -0500, JerryB <slim@hotmail.com> wrote:
>
>>Thanks for the reply. I had seen formulas for dipoles using 468/FMhz
>>and the V's were always 2 to 5% shorter, which would make the V about
>>16 foot per leg. But I guess that's not taking height and angle into
>>consideration. I'm learing so guess I have more to do. Thanks again.
>
>Hi Jerry,
>
>At best, such formulas are a starting point,

468/f is said to have been derived from a low dipole for 40m, strung in the back-alley of the old ARRL HQ building. Anywhere else, expect different results.

>and one should always cut
>the wire LONGER than any solution offers.. This is so that you can
>trim it to accommodate local variations
>
Good advice.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2045. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 22:01:10 UTC
From: "aunwin@insightbb.com"
Message-ID: <GkQUc.184782$eM2.169464@attbi_s51>
Source record: 90766

Steve I thank you for your response and I am beginning to see and have
confidence in what I am saying alss I believe I over explained things which
really created problems.
Energy alonf any member travels at the speed of light wether the member or
element is straight or converluted.
In a straight member the current under goes a phase change at all times thus
from one direction the current varies according to I Cos Phi i.e.
accellerating in value and decellerating in value.
When the same electric current follows a coiled load there is no phase
change and the curreny does diminish slightly
due to resistance loss and the effect of inter coil and capacitance w2hich
vastly affects the impedance as the
current moves around the coil..
because there is no phase change and if we are able to remove the rising
inductance and capacitance created by the close proximety of coils we can
then attain a resistive value of impedance or at least progress to that end.
Thus when you travel around a single coil you are not affected by the
inductance and capacitance in a wound coil so the question is how to achieve
this without a closed loop.
What I did before was to use a small number of open coils made from 1/2
corregated copper transmission line and placed them at various heights as
required by my programing where it provided a very large bandwidth.
So what you may ask, what were your measurements!
So I decided to use upto 20 loops attached to a 40 foot
fibreglass tubing tower. This required a program containg
over 400 segments plus 20 variable dimensions to cover the various distance
between loops and where I predecided on the loop diameter. So you can see
that for this many loops in series makes for a very long program
and with the extra checking I must do so that prior trends
are duplicated. All of this isw intended to produce a vertical for a band
below 20 metres where its actual height and signal strength will be proof of
the pudding.
Thanks again for staying with me and for your advice.
I will definitely keep you informed if the results mirror my previous tests.
I have the tower and I have made the loops and just need one more overcheck
on yhis very long program. Somewhere in between I will work on this laptop
so it will provide readable script and also transfer
my computor program.
Very best regards
Art Unwin KB9MZ......XG
Bloomington ILL
"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:cg0akf$85a$1@newshost.mot.com...
> [... snipping all the agreed to parts so far...Sorry, but all the history

is
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> ALSO, ART. PLEASE do something to make your responses obvious in the body
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> your responses.
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> ***** maybe like this
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> Also, you can use a word processor to compose these messages and get the
> benefit of a spel chek. Hi hi , I am right now, then Cut & Paste into your
> news-reader.
>
> On to the topic.
>
>
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> > >So, if we change the velocity direction (to
> > > always be tangent to the circle) , but not
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> Steve: I am only describing what it takes to get motion around a
circle.
> It is basic physics. I'll try saying it several other ways:
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> The "thing" which represents the acceleration that is causing
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> circle. The object is being accelerated toward the center of its orbit.
> Its acceleration _IS_ directed at the center.
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> Another way to say it is; "In order to get the thing to travel
> in a circle, you must accelerate it toward the center of said circle and

> this acceleration is caused by a constant force toward the center and can
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> just what you are thinking is the effect.
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>
> [...skipping ahead, some, but basically repeating in new terms ...]
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>
> > ART:
> > I am saying that energy is inputed to maintain constant speed which can
be
> > seen as creating a CONSTANT force vector at a tangent.
>
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> Steve: Yes, (in _uniform_, or constant circular motion) it takes a
> constant inward force to get the constant inward acceleration which
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> in the constant circular motion. HOWEVER, I have a SERIOUS problem with
this
> word "CONSTANT" in this context - I address below.
>
>
>
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> Steve: OK, so we are back to this electron flow in a straight wire
> following the sinewave in current, or "cyclic current change ", to use
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> I don't under your cause and your effect here because I do not
> understand what it is that you refer to when you use the words "phase
> change".
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> It is the _generator_ (or transmitter) which is causing the
> current and all the acceleration(s)...many per second. The generator
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> the other, in this sine wave fashion - along the wire. EMF (Electro
Motive
> Force) is call this because it acts like a force to move electrons
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> current) in the wire. It is this force which causes the accelerations and
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> current, therefore there is still the sinewave form of current flow, the
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> > > special radiation that is different from the radiation of the charge
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> > That is correct in that current variation is constant in one case and
> cyclic
> > in the other
>
>
>
> Steve: First, I wouldn't use phrases like "current variation is
> constant". Either there is a variation, or it is constant. This phrase
> implies that something is varying in a very repeatable or constant manner,
> like a sine wave or square wave or triangle wave.
>
>
>
> To answer the content of this comment, most emphatically NO! There
is
> always the cyclic, sinewave variation in current when you bend a current
> carrying conductor into a circle. The AC sine wave doesn't go away.
>
>
>
>
>
> Steve: I skip the area under the curve comment and continue with comments
> on your cosine reference.> >
>
>
>
>
>
> ART:
> > Yes I see the phase change as shown by the current curve.
>
>
>
> Steve You gotta drop this "phase change" phrase. I think you simply mean
> the voltage change over time, meaning the sine wave of current that is a
> given in this situation.

>
>
>
>
>
> ART:
> > and in the case of circular motion I do not see a phase change (I cos
> phi)
>
>
>
>
>
> Ahhhh! OK, perhaps this direction will help. Lets talk about your
> formula
>
> >>> I COS(phi) which is, of course I*COS(phi).
>
>
>
> This formula gives the current at any _instant in time_ when you
> plug-in that value of time. However, "phi" is NOT one number. This is
> actually I*COS(wt) that's omega times "t". This is the formula, or
> mathematical function of the sinewave of an AC signal of constant
> frequency.just what we are talking about.
>
>
>
> This is "I", which is the peak magnitude of the current under
> discussion, times the cosine of the angle given by multiplying the
frequency
> (omega) by the present value of time - Which is CONSTANTLY INCREASING as
> time progresses! This means that the current is constantly changing. If
> you plot these values versus time on a graph, you see our friend the sine
> wave and the tops and bottoms are exactly "I" high (away from zero).
>
>
>
> Steve:
> > > You keep mentioning "constant speed" yet we are talking, I
thought,
> > > about an antenna with RF current in it.
>
> ART: Yes
>
> STEVE: > If this is the case, there is _NO_
> > > constant speed of the current. It is constantly varying in a sine
> wave.
> > > It has a sinusoidal speed variation and therefore a sinusoidal
> > acceleration

>
> > Yes I agree. That would be of the value I cos phi with cos phi providing
> the
> > sign wave. I believe we are saying the same thing
>
>
>
> STEVE:
>
> Then I am unable to understand where you are going. I see nothing new (
> in regards to the basic physics above) created by the antenna being in a
> circle. We just have AC flowing in a circle.
>
>
>
> Some of the problem is your un conventional use of the terminology which
> makes the transfer of the underlying concepts & ideas difficult. It is ok
> to not be formally schooled in a subject. You can be what we call
> "self-educated", but you must learn to use the terminology in he correct
> ways (according to the way the vast majority of us use it) or you won't be
> able to make yourself understood or understand others. Like I tell my
> students, you MUST learn the terminology and use it correctly--- while in
> both cases your head may really hurt, there is a world of difference
between
> a headache and a subdural hematoma!
>
>
>
> ART: It may well be a difference of terms applied but I am pleased you
> follow
> > the main drift of what I was saying so you could be well armed to
> > correct me where I was wrong.
>
>
>
> Steve:
>
> You go on to describe what seems to be an antenna composed of several
large
> horizontal, circular, or perhaps better described as helical, elements
> stacked one above another, where some are wound in right-hand sense and
> others in left-hand sense. I'll not go there because I believe you are
> looking for some kind of a new phenomenon which is the result of this
> arrangement. This may sound elitist, but I believe you are trying to
> discover new physical principles with limited knowledge of the physical
> world. It appears to me that your limited knowledge and ability to put
> concepts to words leads you to believe there is a magic bullet just
waiting
> to be stumbled upon and that you can do it.
>

> Antennas, past the simple dipole (although the basics of radiation is a
> great source of confusion in itself) get complex really fast. A firm
> understanding of how the currents in all parts of an antenna cause remote
> fields that superimpose to cause the total, resulting field is critical to
> being able to devise new and improved antennas, if they exist.
>
> Go ahead and have fun modeling antennas. See what comes out of various
> configurations. I recommend starting out simple to give yourself some
> understanding of 'what' causes 'what'. Using this, build a model in your
> brain (one that suits you) which ALWAYS explains all the observer
phenomena
> as you move along. Your model must NEVER violate any laws of physics or
> fundamental principles which are known to be true. All this must also
make
> sense or "fit" when viewed with all other fundamental concepts, but
> understand that much will be mysterious to you without this understanding.
>
>
>
> I applaud your desire to learn and experiment, while I am sad that you
have
> insufficient background preventing you from seeing some of the real beauty
> of the natural phenomena we call electronics.
>
> > My very best regards to you and thanks for hanging in there as opposed
to
> a
> > derogatory comment
> > Art.
>
> It saddens me when I read some of what is posted. Hams are generally a
very
> friendly lot, but the Internet (UseNet in particular) somehow releases the
> evil in some. We all have our weaker moments. Some of us are just a lot
> closer to them than others. All I can do is a Tsk, Tsk and move on.
>
>
>
> I must lead my life to a higher standard. It's a dirty job, but
somebody's
> got to do it.
>
> Some people go to church and then cut you off and swear at you in traffic.
> I don't do either any more.
>
> 73, Steve
>
>

2046. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 22:06:55 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10i7l4f5iknpi2a@corp.supernews.com>
Source record: 90767

Art
Try bourbon, it lets you keep spelling longer.
73
H.

2047. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 22:21:38 UTC
From: "aunwin@insightbb.com"
Message-ID: <SDQUc.11864$Fg5.8480@attbi_s53>
Source record: 90768

Hi, I do not smoke ,drink or swear but it boggles my mind that this 3 GIG laptop has script the size of a pinhead. I must find time to set this thing up as I want it
Art
"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message news:10i7l4f5iknpi2a@corp.supernews.com...
> Art
> Try bourbon, it lets you keep spelling longer.
> 73
> H.
>
>

2048. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 22:25:31 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <4123d533.1156643234@news.galilei.com>
Source record: 90769

Thanks Rob!

TTUL
Gary

2049. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 22:25:32 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <4123d573.1156707468@news.galilei.com>
Source record: 90770

Hi Jonesy

Thanks for the info!

Could be the wholesale pricing sheet for antenna components that only distributors are supposed to see couldn't it!

How to PIN a CBers coax would have a BOLD INDEX LINK, hi hi.....

TTUL
Gary

2050. Re: Ideas for a home built 2meter/440 dual band base antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 23:27:05 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4123e5ca$0$74190$39cecf19@news.twtelecom.net>
Source record: 90671

I guess I should have said I don't normally use FM or repeaters. Tropo scatter is a fun thing. And I like HF also, but normally run only 100 watts, since it propogates so easily. ;)

tom
K0TAR

Paul Jordan wrote:

> No, I'm not joking at all.. We use repeaters here in Alaska that are on
> nice tall mountains all over the state. Check out the Arctic Amateur
> Radio Club repeater page sometime. Thier repeaters system has over
> 60,000 square miles of coverage.. I can access any of thier repeaters
> with a 5 watt handheld. My Icom 706 only has 10 watts on 2 meters and
> I've never had a problem with reception or transmission into a repeater.
>
> I guess we're just not into the long distance contacts you outsiders
> like to do down there in the lower 48.
>
> What's funny is, you can work satellites and space shuttles with 5 watts
> and a hand held Yagi... I still can't see the need for all that power on
> 2 meters.. I guess if I need to reach out farther, I go HF..
>
> That's what makes this hobby so interesting though, we all have
> different interests.
>
>
> Tom Ring wrote:
>
>> You are, of course, joking. Why wouldn't you want an antenna that
>> handles at least that? 200 watts is low power on VHF and up for many
>> of us.
>>
>> I would expect any fixed antenna system I use on 6 or 2 to handle full
>> legal limit, and 70cm to handle 500 watts minimum. I will admit you
>> normally wouldn't use vertical polarization with that much power, but
>> I still want my antenna/feed systems to handle it without a problem.
>>
>> tom
>> K0TAR
>>
>> Paul Jordan wrote:
>>
>>> I guess my question would be... WHY do you need 200 watts on 2 meters
>>> or 440mhz for that matter??

>>>
>>> Hal Rosser wrote:
>>>
>>>> I would be very tempted to try a discone in this case - just to say
>>>> I made
>>>> one.
>>>> practically no gain - but I hear they have extremely good bandwidth
>>>> - and
>>>> different enough to start interesting QSOs locally
>>>>
>>>>
>>>>
>>>> "Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
>>>> news:10huuo8a91fkn72@corp.supernews.com...
>>>>
>>>>> Does anybody have any good ideas for a good dual band
>>>>> 2 meter/440 antenna? This would be a base antenna and
>>>>> should be capable of handling 200 watts.
>>>>>
>>>>>
>>>>> Thanks
>>>>>
>>>>>
>>>>> Chip
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>
>>>> ---
>>>> Outgoing mail is certified Virus Free.
>>>> Checked by AVG anti-virus system (http://www.grisoft.com).
>>>> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>>>>
>>>>

2051. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-18 23:44:21 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10i7qeu8o99ui86@corp.supernews.com>
Source record: 90672

OK
Your loss.....
Look up Synchrotron Radiation.
Classically, which describes HF radio, the acceleration perpendicular to
motion DOES NO WORK.
73
H.
"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:SDQUc.11864$Fg5.8480@attbi_s53...
> Hi, I do not smoke ,drink or swear but it boggles my mind that this 3 GIG
> laptop has script the size of a pinhead. I must find time to set this
thing
> up as I want it
> Art
> "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
> news:10i7l4f5iknpi2a@corp.supernews.com...
> > Art
> > Try bourbon, it lets you keep spelling longer.
> > 73
> > H.
> >
> >
>
>

2052. Re: NJQRP Squirt 80M antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 00:15:11 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <jiSUc.2125$2L3.940@newsread3.news.atl.earthlink.net>
Source record: 90673

Nothing special about this antenna. It's a dipole fed with ladder line.

--
Listen to Alternative News and Conversation You Won't Hear On Commercial
Radio.
Visit http://live365.com/stations/pascoradio
YOU HAVE BEEN WARNED!

First Time Users May Be asked To Do A 1 Time Setup.
"Mac" <vk2evb@hotmail.com> wrote in message
news:41233a07$0$27222$61ce578d@news.syd.swiftdsl.com.au...
> I found this antenna to work very well on QRP. 34ft either side, inverted
V
> at 30ft high and 45ft 300 ohm slotted ribbon is what I used as per the
> article. On 7mhz and above it worked VERY well and 3.5mhz was a little
down
> but still very useable. I was using 5 watts or less, CW, RTTY, PSK & SSB.
> I now have it rolled up ready for portable work as I have more room for
> larger antenna now. Of course results depend on location but excellent
> performance for what it is.
>
> 73 Peter VK2EVB
> "Theplanters95" <theplanters95@aol.comnospam> wrote in message
> news:20040817014556.23098.00003683@mb-m07.aol.com...
> > From April 2001, QST.
> >
> > The NJQRP squirt is a 40M dipole with each leg at 34 ft, feed with 300
ohm
> > twinlead for use on 80M. I'm thinking of putting one up, but using 450
> > ohm
> > window line going to my trusty Dentron Jr. antenna tuner. How will
this
> > antenna perform on 75m-6m?
> >
> > My guess is that since each leg is more than 1/2 wavelength on the bands
> > above
> > 20m, it will exhibit some gain. On 40m, it would be a dipole, and
> > according to
> > the article, will exhibit about 1 S unit (7.7 DB) with 300 ohmline of
loss
> > on
> > 75/80m.
> >
> > I do not have the means to model this antenna. The antenna will be
> > between 10

> > and 20 feet high (I'm looking for NVIS for ARES on 75m & 40m). With
these
> > parameters, will the antenna be ok for DX on the higher bands? Is it an
> > ok
> > compromise until I put up a loop antenna? I'm just interested in getting
a
> > signal out!
> >
> > Randy ka4nma
> >
> > you can email me directly at theplanters95NOSPAM@aol.com, after making
the
> > neccessary correction.
>
>

2053. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 00:23:05 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cg0rt9$f5i$1@hercules.btinternet.com>
Source record: 90674

A very rare, welcomed, combination of events has occurred.

First we have a sensible, concise, well-presented enquiry about inverted-V's.

And secondly we have a response from Richard (Clark) which combines both his advanced (never doubted) technical knowledge and his ability (but long awaited) to express himself in the logical, unambiguous, easy-to-understand English language.

Makes a change from the deliberately confusing, psychologicially mixed-up stuff we are accustomed to. Keep up the good work.

But may I say I have learned a lot over the years from your own how-not-to-do-it mode of expressing yourself.

Richard, please forgive me for being so forthright in public. I'm on Valencia red this evening. I'm sure you will understand.

Incidentally, I think the English and American languages, after a generation's lapse, are coming back closer together again. You get rid of Bush and we'll get rid of Blair.

Yours, Punchinello, G4FGQ.

2054. Re: Reflector - reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 00:34:01 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cg0shpnra1@sparta.btinternet.com>
Source record: 90675

"Ken Luther" <sparkzz@aol.com> wrote in message
news:kfOUc.442$UZ4.105@bignews3.bellsouth.net...
> Hello,
>
> Dumb question for all of the experts:
>
> In a beam antenna, such as a Yagi, Quad, Hexbeam, Moxon square, etc
> what purpose does the REFLECTOR server during RECEIVE???
> Does it enhance the received signal any at all, or, in the case of a quad,
> are you receiving only as if you only had a vertical loop antenna??
>
==========

Receiving and transmitting antennas are reciprocal. They behave identically
in performance and radiation pattern for either direction of transmission.
It's just another law of nature, the word of God, or a scientific dictate
according to your view of the World.

Reg.

2055. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 00:42:34 UTC
From: dgoncz@aol.com
Message-ID: <20040818204234.22535.00001502@mb-m11.aol.com>
Source record: 90676

Excerpting:

>From: DGoncz@aol.com (Doug Goncz) (Me)

>With twenty feet of twinax from IEC, I am now able to receive WHFS in
>stereo from Annapolis, MD, here in Seven Corners, VA reliably.

>Both the antenna and 1/8 stereo phone plug terminations need work, but
>are working.

>Could any of you tell me where I can buy some pretinned 1/8 stereo
>phone plugs with metal sheilded barrels?

>Anyway, if you know where to buy a good quality, readily tinned phone
>jack, please let me know.

>The ones I buy at Radio Shack
>don't tin well

Yours,

Doug Goncz (ftp://users.aol.com/DGoncz/incoming)
Student member SAE for one year.
I love: Dona, Jeff, Kim, Mom, Neelix, Tasha, and Teri, alphabetically.
I drive: A double-step Thunderbolt with 657% range.

2056. Tuner/balun efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 01:42:00 UTC
From: bob <bob-baldwin@tamu.edu>
Message-ID: <10i81b4h2kshb1d@corp.supernews.com>
Source record: 90677

Which should be more efficient: Using an ATR-30 to match a 300 ohm load directly through a W2DU type balun, or using the same tuner to match 150 ohms using a CWS Bytemark 2:1 balun? Bandwidth is not a concern.I already have the tuner and baluns. I realize there may be little difference between the two choices, but I will be using the tuner and one of the baluns anyway.

73,
bob

2057. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 01:44:31 UTC
From: sbc yahoo news <nn7kexk7zfg@nospamsbcglobal.net>
Message-ID: <3CTUc.71$Rp6.47@newssvr14.news.prodigy.com>
Source record: 90678

For most part must agree with all, and REMEMBER, that these are NOT totally exact-- for instance- done
same with (YE-GADS!) a 6 meter 7 element yagi, with pretty well known properties, by M-Squared, both in
YO, and in EZNEC-- and the forward gain is more or less identicle, but the F/B is something else! However, didn't
taper the elements (first 18 inchs at a given diameter, rest of el length, a smaller size tubeing-- does this make
EZNEC an error prone program? NO! t'was my fault in NOT takeing the time to input all those extera connections
into the model ! (tho, would be interesting to see it PROPERLY modeled, and admittedly, YO handles this much easier
for a yagi- did the same for a DX engineering, (elements ALL same diameter) and forward gain is about the same
and the f/b is within 5 db (the 7 elM squared is about 15 dB different F/B)
But all in all, best to trust EZNEC-
seems pretty much dead on for most applications. as info-- Jim NN7K And, PS, is nice to see a CIVIL conversation
here! JF

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:cg0rt9$f5i$1@hercules.btinternet.com...
>
> A very rare, welcomed, combination of events has occurred.
>
> First we have a sensible, concise, well-presented enquiry about
> inverted-V's.
>
> And secondly we have a response from Richard (Clark) which combines both his
> advanced (never doubted) technical knowledge and his ability (but long
> awaited) to express himself in the logical, unambiguous, easy-to-understand
> English language.
>
> Makes a change from the deliberately confusing, psychologicially mixed-up
> stuff we are accustomed to. Keep up the good work.
>
> But may I say I have learned a lot over the years from your own
> how-not-to-do-it mode of expressing yourself.
>
> Richard, please forgive me for being so forthright in public. I'm on
> Valencia red this evening. I'm sure you will understand.
>

> Incidentally, I think the English and American languages, after a
> generation's lapse, are coming back closer together again. You get rid of
> Bush and we'll get rid of Blair.
> ---
> Yours, Punchinello, G4FGQ.
>
>

2058. Re: EZNEC Help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 01:54:34 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4124085b$0$74190$39cecf19@news.twtelecom.net>
Source record: 90679

Set up the yagi in YO with the proper taper, and then save the yagi
design with the .ANT extension. This will cause YO to save it as an AO
type file. That should get you a well along the way for your EZNEC entries.

tom
K0TAR

sbc yahoo news wrote:

> For most part must agree with all, and REMEMBER, that these are NOT totally
> exact-- for instance- done
> same with (YE-GADS!) a 6 meter 7 element yagi, with pretty well known
> properties, by M-Squared, both in
> YO, and in EZNEC-- and the forward gain is more or less identicle, but the
> F/B is something else! However, didn't
> taper the elements (first 18 inchs at a given diameter, rest of el length, a
> smaller size tubeing-- does this make
> EZNEC an error prone program? NO! t'was my fault in NOT takeing the time
> to input all those extera connections
> into the model ! (tho, would be interesting to see it PROPERLY modeled, and
> admittedly, YO handles this much easier
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> and forward gain is about the same
> and the f/b is within 5 db (the 7 elM squared is about 15 dB different F/B)
> But all in all, best to trust EZNEC-
> seems pretty much dead on for most applications. as info-- Jim NN7K And,
> PS, is nice to see a CIVIL conversation
> here! JF
>
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> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cg0rt9$f5i$1@hercules.btinternet.com...
>
>>A very rare, welcomed, combination of events has occurred.
>>
>>First we have a sensible, concise, well-presented enquiry about
>>inverted-V's.
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>>And secondly we have a response from Richard (Clark) which combines both
>
> his
>
>>advanced (never doubted) technical knowledge and his ability (but long
>>awaited) to express himself in the logical, unambiguous,
>

> easy-to-understand
>
>>English language.
>>
>>Makes a change from the deliberately confusing, psychologicially mixed-up
>>stuff we are accustomed to. Keep up the good work.
>>
>>But may I say I have learned a lot over the years from your own
>>how-not-to-do-it mode of expressing yourself.
>>
>>Richard, please forgive me for being so forthright in public. I'm on
>>Valencia red this evening. I'm sure you will understand.
>>
>>Incidentally, I think the English and American languages, after a
>>generation's lapse, are coming back closer together again. You get rid of
>>Bush and we'll get rid of Blair.
>>---
>>Yours, Punchinello, G4FGQ.
>>
>>
>
>
>

2059. Re: Tuner/balun efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 02:00:44 UTC
From: sbc yahoo news <nn7kexk7zfg@nospamsbcglobal.net>
Message-ID: <gRTUc.74$Rp6.0@newssvr14.news.prodigy.com>
Source record: 90680

Bob-- Effecient?? That term can apply to the LOSS in your feed line/
VSWR?Frequency!
and, obviously, the POWER HANDLEING capabilities of the tuner/feedline!
But, generally, unless
you are at VHF, with couple hundred feet of feedline (I.E. 10 meters, or
below)! any effeciency
difference will never be HEARD!! the loss diff will probably be less than 1
dB!
My advice? go for it, as long as it is in your tuners power rateing, for hi
Z mismatch!
Jim NN7K

Bob sent:
"bob" <bob-baldwin@tamu.edu> wrote in message
news:10i81b4h2kshb1d@corp.supernews.com...
> Which should be more efficient: Using an ATR-30 to match a 300 ohm load
> directly through a W2DU type balun, or using the same tuner to match 150
> ohms using a CWS Bytemark 2:1 balun? Bandwidth is not a concern.I already
> have the tuner and baluns. I realize there may be little difference
between
> the two choices, but I will be using the tuner and one of the baluns
> anyway.
>
> 73,
> bob

2060. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 02:33:50 UTC
From: "aunwin@insightbb.com"
Message-ID: <hkUUc.282070$%_6.105405@attbi_s01>
Source record: 90681

O.K. I am curious.
"Acceleration perpendicular to motion does no work".
That's an odd statement. What caused that to come to mind on this thread?
Best regards
Art

"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:10i7qeu8o99ui86@corp.supernews.com...
> OK
> Your loss...................
> Look up Synchrotron Radiation.
> Classically, which describes HF radio, the acceleration perpendicular to
> motion DOES NO WORK.
> 73
> H.
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:SDQUc.11864$Fg5.8480@attbi_s53...
> > Hi, I do not smoke ,drink or swear but it boggles my mind that this 3
GIG
> > laptop has script the size of a pinhead. I must find time to set this
> thing
> > up as I want it
> > Art
> > "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
> > news:10i7l4f5iknpi2a@corp.supernews.com...
> > > Art
> > > Try bourbon, it lets you keep spelling longer.
> > > 73
> > > H.
> > >
> > >
> >
> >
>
>

2061. Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 02:55:21 UTC
From: manuka@orcon.net.nz
Message-ID: <dd8572bb.0408181855.5437f40b@posting.google.com>
Source record: 90682

We've had a LOT of fun (& publicity)here in New Zealand over DIY antenna brewed up for 2.4GHz USB WiFi.See => www.usbwifi.orcon.net.nz The parabolic Chinese cookware used gave ~15dB gain at 2.4GHz, but of course any radiation will be concentrated at a parabola's focal point. Aha - could suit "log cabin in the woods " cell phone boosting ? Indeed it does, & 900/1800MHz GSM cell phone reception improvement has also been verified when the phone is cradled at the FP. Naturally you'll find it hard to speak at this position,unless perhaps a Bluetooth headset used, but at least inward calls/text messages can now be received. See => http://www.usbwifi.orcon.net.nz/cellbear.jpg & http://www.usbwifi.orcon.net.nz/wokaxim.jpg

This sure beats constructing Yagis,& 12" woks here in NZ are just ~US$5! Stan (ZL2AJZ)

2062. New Colorado Amateur Radio group

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 03:14:35 UTC
From: Mama Bear <MamaBear@NoSpam.noo>
Message-ID: <Xns9549D82A238EMama@206.124.0.13>
Source record: 90683
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,co.general

http://groups.yahoo.com/group/COAR/

--
- Mama Bear

2063. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 10:44:46 UTC
From: fractenna@aol.com
Message-ID: <20040819064446.07359.00001568@mb-m15.aol.com>
Source record: 90684

>We've had a LOT of fun (& publicity)here in New Zealand over DIY
>antenna brewed up for 2.4GHz USB WiFi.See => www.usbwifi.orcon.net.nz
>The parabolic Chinese cookware used gave ~15dB gain at 2.4GHz, but of
>course any radiation will be concentrated at a parabola's focal point.
>Aha - could suit "log cabin in the woods " cell phone boosting ?
>Indeed it does, & 900/1800MHz GSM cell phone reception improvement has
>also been verified when the phone is cradled at the FP.
>Naturally you'll find it hard to speak at this position,unless perhaps
>a Bluetooth headset used, but at least inward calls/text messages can
>now be received. See => http://www.usbwifi.orcon.net.nz/cellbear.jpg
>& http://www.usbwifi.orcon.net.nz/wokaxim.jpg
>
>This sure beats constructing Yagis,& 12" woks here in NZ are just
>~US$5! Stan (ZL2AJZ)
>

Hi Stan,

Mine doesn't quite fit a paraboloid. Here's some fun checking the gain:

Gain approx= 10 D(waves)^2

My wok is about 36 cm, or approximately 3 waves. Thus I would expect about a
factor of 90 in gain with 100% aperture efficiency.

You've possibly lost about 2-4 dB. But--you're cookin' anyway:-)

73,
Chip N1IR

2064. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 11:51:52 UTC
From: dgoncz@aol.com
Message-ID: <20040819075152.19157.00003714@mb-m06.aol.com>
Source record: 90685

Here are some pics of the antenna:

08/19/2004 07:45AM 112,318 CeilingSpacer.JPG
08/19/2004 07:45AM 111,110 HangerAndLead.JPG
08/19/2004 07:45AM 137,884 LeadCloseup.JPG

and links:

ftp://users.aol.com/DGoncz/Antenna/CeilingSpacer.JPG

ftp://users.aol.com/DGoncz/Antenna/HangerAndLead.JPG

ftp://users.aol.com/DGoncz/Antenna/LeadCloseup.JPG

I intend to air-space the twin leads down to above head height, then move the remaining twinax to the hanger, after adding a _little bit_ of weight at the bend to tension the leads. This should form an air spaced graduated impedance "converter" without the need for a minimum loss pad.

If I could just get a more easily solderable stereo phone jack....

Maybe even one rated for RF....

Yours,
Doug Goncz (ftp://users.aol.com/DGoncz/incoming)
Student member SAE for one year.
I love: Dona, Jeff, Kim, Mom, Neelix, Tasha, and Teri, alphabetically.
I drive: A double-step Thunderbolt with 657% range.

2065. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 13:09:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n189i0tno1qpo3fahj8eqm5bjqlg4bbbc9@4ax.com>
Source record: 90686

On 18 Aug 2004 11:47:24 -0700, DGoncz@aol.com (Doug Goncz) wrote:

>Could any of you tell me where I can buy some pretinned 1/8 stereo
>phone plugs with metal sheilded barrels? The ones I buy at Radio Shack
>don't tin well with rosin flux and a fresh tip, using 60/40 solder. I
>have to scrape them to bare metal and heat them so much the plastic
>insulators soften a little. At these frequencies, that matters. Yes, I
>replaced the polyethylene between the legs with hot melt. Of course I
>did. But still, see below, there are refinements.

Hi Doug,

Sounds like you need more practice soldering. All this scraping you
describe is unnecessary because you should already have bare metal.

>I don't know what engineer at Wizard decided to run their dipole
>antenna in through a phone jack. Fer cryin' out loud, was it just
>because the line output is a phone jack and they couldn't spare two
>cents? What a hassle.

The jack is not particularly an issue for its use, it is your attempts
to connect the twin lead to it (if that is what you mean by twinax).
You need to go to radio shack and buy a TV-Coax BalUn. You can
recognize it as a small (little finger sized) device that transitions
from twin lead to Coax connections. It usually has a twin lead dangle
with female Coax connector. Then obtain some small diameter Coax (it
doesn't really matter what impedance, so go for esthetics). The small
Coax should more readily adapt to the phono plug and not be so stiff
as to strain it. Choose a long lead of this Coax and attach the phono
plug at one end, and the F connector at the other (make sure to buy
one you can solder to if you are getting smaller diameter cable, and
practice your soldering with the expectation of wasting something
before you succeed).

There is nothing particularly precision about this, so close attention
to spacing, such as you describe it, is not very productive. If what
you describe as twinax is Coaxial cable, you have more issues of
soldering skills and antenna placement (get it outside).

>By using the VU meter on my Cool Edit, I was able to point the
>antenna. I braced it off the ceiling with a cigarette pack and a strip
>of double sided foam adhesive tape, then tapped it with a wooden
>paddle to move it about a degree at a time. It's not an RF meter, but
>it does get an optimal result. T and I will switch positions next
>time, so I can interpret the varying audio levels during transmission

>as indicators of reception quality. Variability was over 30 db. I'll
>provide a better estimate when we swap positions. I was the one moving
>the antenna this time.

For the distance between you and the station, try to get the antenna higher (yes I know you are against the ceiling, this too may be an issue). If you can, move it outdoors and UP. Your VU meter is all you need to confirm signal strength (at least to find the signal). To insure you are doing your best move the antenna left-right/up-down to find all 4 points where the signal completely goes away, and then split the difference for a center. From your pictures it looks like you have an outside antenna and not rabbit ears anyway (you need a picture more removed from just looking at wire connections).

> If you
>stand too close to it, the signal fades, even though it is sheilded.

Skip all considerations of ground. Your problem is YOU reflecting signal and acting as a second antenna - another reason to get the antenna outside.

73's
Richard Clark, KB7QHC

2066. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 14:29:13 UTC
From: dgoncz@aol.com
Message-ID: <20040819102913.19192.00003728@mb-m06.aol.com>
Source record: 90687

Dear Richard,

You have my thanks for your reply.

>From: Richard Clark kb7qhc@comcast.net

>Sounds like you need more practice soldering. All this scraping you
>describe is unnecessary because you should already have bare metal.

I have 36 years of experience soldering.

Have you tried tinning Radio Shack's 274-284 connector? It acts as if it's made of stainless steel. Maybe a chisel tip would work better.

One problem I am having is all my tools are at my home shop and the antenna and radio are here at my office. Going back and forth confuses me.

>The jack is not particularly an issue for its use

I think there's a reflection at the jack, forming a resonant tank. The frequency depends on the cable length. A little less than 20 feet.

>it is your attempts
>to connect the twin lead to it (if that is what you mean by twinax).

I had used twinlead. I went to twinxial cable, two 20 gage conductors with polyethylene around them, in a polyethylene carrier, with a foil shield and what must be close to 100% overbraid. It is Coleman Cable 99301 20 gage 100 ohm twinaxial type CL2.

>You need to go to radio shack and buy a TV-Coax BalUn.

No, this is a stereo phone plug with balanced signal on tip and ring. I have added ground on the barrel. The original antenna is a 22 gage dipole insulated with polyethylene, not PVC. Each leg is 30 inches long. The pair to the plug is 39 1/2 inches long.

>If what
>you describe as twinax is Coaxial cable, you have more issues of
>soldering skills and antenna placement (get it outside).

The condominium association will not permit an outside antenna.

>For the distance between you and the station, try to get the antenna
>higher (yes I know you are against the ceiling, this too may be an
>issue).

We're on the third floor. I note that if the antenna is allowed to tilt, the signal fades. I have replaced the cigarette pack spacer by a foam block. It's level now. The boom surface is three inches from the ceiling. Should it be farther from the ceiling?

I just filed up a chisel tip.

This morning I lengthened the lead from the antenna to the twinax by stripping more shield, foil, and filler. Now it works very badly. No stereo reception of WHFS. Extending the sheild with foil helped. The legs are 18 inches long.

What I need is:

How long should the legs be at the antenna end?

How long should the filler alone be?

How long should the section with foil over filler be? (Should this foil be tapered?)

How long should the braid be?

How long should the rest of cable, in its natural condition be?

What's a good way to terminate the twinaxial cable to the phone plug?

I have a short connection but no picture.

After I tin the plug, I really don't know how to do this best.

Ok, I've tinned the plug. It was much faster and easier with the chisel tip.

Now what, I wonder?

Yours,
Doug Goncz (ftp://users.aol.com/DGoncz/incoming)
Student member SAE for one year.
I love: Dona, Jeff, Kim, Mom, Neelix, Tasha, and Teri, alphabetically.
I drive: A double-step Thunderbolt with 657% range.

2067. Re: Tuner/balun efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 14:36:01 UTC
From: bob baldwin <bob-baldwin@tamu.edu>
Message-ID: <cg2e1a$9p4$2@news.tamu.edu>
Source record: 90688

Yes, Jim-- I agree with you in that the difference will be very
small, and
is more academic than anything. I have the antenna and feedline up and
working (at a portable location), so now I'm just playing with ideas. I want
a simple antenna for a small segment of 75 that will be as efficient as is
practical. I will be operating out of my truck at a power level of no
more than
500 watts, and most of the time will be barefoot. What I'm curious about is
the tradeoff of tuner efficiency between 150 ohms and 300 ohms by using
either a 1:1 balun or 2:1 balun. My guess is that there will be less
loss at
150 ohms with the 2:1 than at 300 ohms with the 1:1 W2DU type balun.
The 300 ohm window line is matched to the antenna, so there is little or no
reflected power at resonance and only 4% reflected at 3.870 and 3.4% at
4.0.
Eznec 4.0 shows that the tuner will see 317 ohms at resonance with a 1:1
balun. The system is working now, and I'm just nitpicking minor details at
this point.
> Bob-- Effecient?? That term can apply to the LOSS in your feed line/
> VSWR?Frequency!
> and, obviously, the POWER HANDLEING capabilities of the tuner/feedline!
> But, generally, unless
> you are at VHF, with couple hundred feet of feedline (I.E. 10 meters, or
> below)! any effeciency
> difference will never be HEARD!! the loss diff will probably be less than 1
> dB!
> My advice? go for it, as long as it is in your tuners power rateing, for hi
> Z mismatch!
> Jim NN7K
>
> Bob sent:
> "bob" <bob-baldwin@tamu.edu> wrote in message
> news:10i81b4h2kshb1d@corp.supernews.com...
>
>>Which should be more efficient: Using an ATR-30 to match a 300 ohm load
>>directly through a W2DU type balun, or using the same tuner to match 150
>>ohms using a CWS Bytemark 2:1 balun? Bandwidth is not a concern.I already
>>have the tuner and baluns. I realize there may be little difference
>
> between
>
>>the two choices, but I will be using the tuner and one of the baluns
>>anyway.
>>

>>73,
>>bob
>
>
>

2068. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 15:25:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cce9i0lvp5mffhrejqugnoj2lmp8i7u06c@4ax.com>
Source record: 90689

On 19 Aug 2004 14:29:13 GMT, dgoncz@aol.com (Doug Goncz) wrote:

>Dear Richard,
>
>You have my thanks for your reply.
>
>>From: Richard Clark kb7qhc@comcast.net
>
>>Sounds like you need more practice soldering. All this scraping you
>>describe is unnecessary because you should already have bare metal.
>
>I have 36 years of experience soldering.
>
>Have you tried tinning Radio Shack's 274-284 connector? It acts as if it's made
>of stainless steel. Maybe a chisel tip would work better.

Why would Radio Shack spend more for stainless steel? Who in their
right mind would produce it? I have never had any problems with the
cheapest of materials to wet with solder. You are having some other
difficulty and it may be this wire you are trying to use (ever try
soldering old telephone wire?). Does it wet easily?

>I think there's a reflection at the jack, forming a resonant tank. The
>frequency depends on the cable length. A little less than 20 feet.

20 feet is not resonant (first resonance that is) at any particular
commercial frequency.

>>it is your attempts
>>to connect the twin lead to it (if that is what you mean by twinax).
>
>I had used twinlead. I went to twinxial cable, two 20 gage conductors with
>polyethylene around them, in a polyethylene carrier, with a foil shield and
>what must be close to 100% overbraid. It is Coleman Cable 99301 20 gage 100 ohm
>twinaxial type CL2.
>
>>You need to go to radio shack and buy a TV-Coax BalUn.
>
>No, this is a stereo phone plug with balanced signal on tip and ring. I have
>added ground on the barrel.

Sleeve.

>The original antenna is a 22 gage dipole insulated
>with polyethylene, not PVC.

Immaterial really.

>Each leg is 30 inches long. The pair to the plug
>is 39 1/2 inches long.

Still rather immaterial. There are optimal lengths, but trivial for
receivers.

>We're on the third floor. I note that if the antenna is allowed to tilt, the
>signal fades.

Indicative of multipath rather than actually pointing at the
transmitter. Your antenna is looking into a soup of direct
transmission waves, and reflections, re-reflections and so on.

Alternatively, you don't have enough signal, and all the tilting,
wiring, jacking, and soldering in the world is not going to make up
for it. Add about 10dB of amplification at the antenna.

>I have replaced the cigarette pack spacer by a foam block. It's
>level now. The boom surface is three inches from the ceiling. Should it be
>farther from the ceiling?

There is nothing good about its close proximity. However, it may be
benign. You should not be as close as the length of any antenna
element from other conductors (you don't know what is in the ceiling
for the thirty odd inches proximity).

>I just filed up a chisel tip.

That is poor practice. You are already melting the connector's
plastic. Solder should flow within seconds at these small dimensions
for even a 30W iron with a pencil tip.

>This morning I lengthened the lead from the antenna to the twinax by stripping
>more shield, foil, and filler. Now it works very badly. No stereo reception of
>WHFS. Extending the sheild with foil helped. The legs are 18 inches long.

Like I said, this is all futile reminiscent of tin foil rabbit ears
aligned with the rising moon and setting Venus. Your signal is
marginal and suffering from multipath to boot.

>What I need is:
>
>How long should the legs be at the antenna end?

Length is not an issue, separation is. Even here it is of no
particular concern. The enforcement of that is dictated by the
mechanical connections at the antenna and the taper to the usual,
conventional twin line has been commonplace for 60 years.

>How long should the filler alone be?
>
>How long should the section with foil over filler be? (Should this foil be
>tapered?)
>

>How long should the braid be?

These are unconventional and cannot be said to be aiding you whatever optimal values may be offered.

>How long should the rest of cable, in its natural condition be?

The only criteria is that it should not be so long as to attenuate the signal through loss. Conventional installations for years went tens of feet to a hundred feet - depending upon signal strength. You don't have signal strength.

>What's a good way to terminate the twinaxial cable to the phone plug?

I seriously doubt you have a female stereo connector to plug into - this too is unconventional. If you do, the sleeve connection was never used in the original configuration (the original antenna only had two leads to begin with by your description).

Twinax (Triax) is not conventional and you give every appearance of either shorting out the antenna, and only picking up opportunistic signal strength; or you have a floating shield that is picking up opportunistic signal strengths and coupling it randomly into the receive signal from the antenna. Either way, there is something definitely fishy about the arrangement. If you want to persist with using twinax, connect the two shields together at both ends (and at the phono end, going to the ring, and the center conductor to the tip), and do not make any sleeve connection at the radio.

>Now what, I wonder?

Buy an amplifier.

73's
Richard Clark, KB7QHC

2069. Re: CALL SIGN LOOKUP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 15:47:05 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnci9irp.up6.bit-bucket@shell.config.com>
Source record: 90690

On 17 Aug 2004 20:06:07 GMT, Allodoxaphobia hath writ:
> On Tue, 17 Aug 2004 17:54:27 GMT, Jimmie hath writ:
>>
>> "J999w" <j999w@aol.com> wrote in message
>> news:20040817091339.14599.00001819@mb-m29.aol.com...
>>> A ham callsign?
>>>
>>> Online info is a good thing, saves you the effort of giving out your
>>> address if you want to get a QSL from the bloke you're working.
>>>
>>> Why would you want to block your info ... something to hide???
>>
>> Sorry about any confusion because of user ID but I was using my daughters
>> computer. Thought I had it set up to give my name. Nothing to hide. Read
>> what you snipped. I was just trying to figure out why I could not get this
>> information on some else who says he has been a ham for a while. I plugged
>> in his call sign in google and did not get the usuall information back from
>> a callsign data base. First time this has happened to me.
>
>> Was I talking to someone with a bogus call.
> Question mark?

<--snip-->

> Elsewise, just entering the callsign in Google will only reflect how
> "busy" the op is on the web, in usenet, ... and/or in contests.
> (I find my call often in contest logs that folks feel a need to post
> on web sites....) I'm sure there are some grizzled olde (active)
> op's that have never owned or used a computer (not even a Commodore 64),
> and whose existance could not be proven by Google. (Google usually
> does not index the pages given up by other "look-up" engines such as
> QRZ.COM and BUCK.COM.)

So, as an experiment, I entered into Google the callsign my dad
(The First W3DHJ) last held before he became a SK nearly 6 years ago.
He was semi-active on packet radio about 5 years before his death.
But, AFAIK, he was never on the internet.
The only hit I got was deep down in the "available callsigns' lists"
hosted at
http://sattrackhouston.com/vanity.htm

So, even at that, I guess you'd call that a "non-specific hit" -- since
it was not about him, but rather about an amateur callsign he once held.

73
Jonesy

```
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK
```

2070. Re: Tuner/balun efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 16:54:33 UTC
From: bob baldwin <bob-baldwin@tamu.edu>
Message-ID: <cg2m07gql1@news.tamu.edu>
Source record: 90691

I neglected to mention that this is an antenna for operating portable. It is an inverted V, 50' in the center, and 20' on the ends. 300 ohm window line (from the Wireman) is delta matched, and is for 75 only. Settings on the tuner (ATR-30) when at antenna resonance are the same as when using a 330 ohm carbon resistor and 359b as a source. Predictions from Eznec 4.0 appear to be very accurate (500 segments).

73,
bob

>
> Yes, Jim-- I agree with you in that the difference will be very
> small, and
> is more academic than anything. I have the antenna and feedline up and
> working (at a portable location), so now I'm just playing with ideas. I
> want a simple antenna for a small segment of 75 that will be as efficient
> as is practical. I will be operating out of my truck at a power level of
> no more than
> 500 watts, and most of the time will be barefoot. What I'm curious about
> is the tradeoff of tuner efficiency between 150 ohms and 300 ohms by using
> either a 1:1 balun or 2:1 balun. My guess is that there will be less
> loss at
> 150 ohms with the 2:1 than at 300 ohms with the 1:1 W2DU type balun.
> The 300 ohm window line is matched to the antenna, so there is little or
> no reflected power at resonance and only 4% reflected at 3.870 and 3.4% at
> 4.0.
> Eznec 4.0 shows that the tuner will see 317 ohms at resonance with a 1:1
> balun. The system is working now, and I'm just nitpicking minor details at
> this point.
>> Bob-- Effecient?? That term can apply to the LOSS in your feed line/
>> VSWR?Frequency!
>> and, obviously, the POWER HANDLEING capabilities of the tuner/feedline!
>> But, generally, unless
>> you are at VHF, with couple hundred feet of feedline (I.E. 10 meters, or
>> below)! any effeciency
>> difference will never be HEARD!! the loss diff will probably be less than
>> 1 dB!
>> My advice? go for it, as long as it is in your tuners power rateing, for
>> hi Z mismatch!
>> Jim NN7K
>>
>> Bob sent:
>> "bob" <bob-baldwin@tamu.edu> wrote in message
>> news:10i81b4h2kshb1d@corp.supernews.com...
>>

>>>Which should be more efficient: Using an ATR-30 to match a 300 ohm load
>>>directly through a W2DU type balun, or using the same tuner to match 150
>>>ohms using a CWS Bytemark 2:1 balun? Bandwidth is not a concern.I already
>>>have the tuner and baluns. I realize there may be little difference
>>
>> between
>>
>>>the two choices, but I will be using the tuner and one of the baluns
>>>anyway.
>>>
>>>73,
>>>bob
>>
>>
>>

2071. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 17:27:55 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cg2o3e$k58$1@newshost.mot.com>
Source record: 90692

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message news:GkQUc.184782$eM2.169464@attbi_s51...
> Steve I thank you for your response and I am beginning to see and have
> confidence in what I am saying alss I believe I over explained things which
> really created problems.

Art, [short version: We're going to get nowhere unless we have a common terminology. The words you use clearly do not mean the same thing to you as what most others have come to accept.]

Could you, perhaps, tell me in simple terms, just what it is you hope to accomplish or prove, or achieve with all this? What is your goal? When it is built and working per your ideas, what is this stack of "open loops" going to do, or not do [that other antennas don't do, or do] ???

Long version...
I don't think you over explain, I believe you are using the terminology in unconventional ways and therefore I am unable to understand what the underlying concept is to which you refer. You use "Phase change" in a way that I can not understand.

I am unable to get past what you are trying to say here:

> In a straight member the current under goes a phase change at all times thus
> from one direction the current varies according to I Cos Phi i.e.

[If I understand what you refer to] The proper way to describe this is to say that the "current" goes through an "amplitude" or "magnitude" change (a result of the AC sine wave nature of the generator) That is to say-as we know, the current builds up to a maximum, then falls to zero rapidly, then reversing direction and building to that same magnitude in the opposite direction whereupon it falls back to zero and repeats ad nausium. This, of course, is a standard sine wave of current we also call AC or RF.
The "phase", on the other hand, is a term we use to refer to the _whole cycle_ -- all parts of the cyclic variation we call AC or a sine wave. This _whole thing_ can be compared to another sine wave of the same frequency and we can then talk about the relative phase of one to the other. These two can also be the reative phase of currents in differnt parts of a circuit or different parts of an antenna.

The problem is that if there truly is a "phase change" in a sine wave, there must also be a frequency change for a short time until the phase stops changing and arrives at the new value of phase (relative to whatever we choose to be the reference.

A synonym for phase is "time". The time at which a given part of a wave form occurs detrermines its phase. Teo waves are in phase when they are in "time step" or occur at the same time. When they occur at different times, then they are at different phases.

> accellerating in value and decellerating in value.

They are accelerated at various rates, thus change in velocity (which we equate to current)

It "increases" and "decreases" in value. The change in magnitude is accompanied by the requisite accelerations of the electrons, this is true. [note that "deceleration" is simply another way of stating the mathematically accurate negative acceleration]

Now comes the choker...

> When the same electric current follows a coiled load there is no phase
> change

Here's where I choke! I can not, for the life of me, figure out what you mean by "no phase change".
In commonly accepted terminology this means that the frequency of the signal is constant, and it is as far as I am concerned in the in-coiled, straight wire version as well!.
However, in light of your previous use, which appears to mean that the current is varying, this makes no sense, since the current sinewave is still present.

It doesn't make any sense to continue to discuss trying to remove "rising inductance and capacitance ", your "1/2 corregated copper transmission lines", Why you feel the need to NOT have a closed loop, what an "open loop is", or the rest without a common language which allows you to transfer the concepts you which to present.
Could you, perhaps, tell me in simple terms, just what it is you hope to accomplish or prove, or achieve with all this? What is your goal?

Sorry Art.

2072. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 19:07:17 UTC
From: "aunwin@insightbb.com"
Message-ID: <ET6Vc.189900$eM2.38060@attbi_s51>
Source record: 90693

Hi Hal
I'LL be happy to explain where I am coming from but this time I will try to explain my thoughts
in a non technical way which may be seen as folksy which may well bring some caustic comments
but I do owe it to all since I asked for help.
First
My aiim is to negate the onslaught of inductance and capacitance to ward off rapid changes in
impedances
Secondly
I want to see what changes occur by using corregated material as radiators compared to smooth surfaces..
Now I will rerlate how my thought processes work even tho they may be totally out of whack
but it will help to explain the terms I use.

If one looks at an A.C. generator it can be seen that the shaft rotates at a constant speed and
it helps to see this by attaching a ball on a string and tieing it to the shaft. The circular motion when looking at the shaft endwise
makes the circular pattern very obvios. If however, you look at the shaft side ways on what you will see is a ball going up and down
either siode of the shaft. If one moves the generator a short distance as the ball takes one revolution
a sinosoidal; trace will be apparent arount the shaft axis which can be interprete by some as showing acceleration and deceleration of current
even tho that hwich generates this trace or graph is rotating at a constant spoeed
(This being important because it may be synonamous to some as compared to the speed of light)
Now let us look at another version of movement in that the generator instead of moving in a linear motion takes on a circular motion
and where the rotary speed of the shaft still revolves at a constant speed.
From this. we can say that the speed of energy along the radiator is still the same as in the first example ,but what is different?
If the generator was moved forward in the fiirst instance there was an equal and opposite reaction force which can be seen
as a cloud of dust as a car accelerates forward. In the second instance the car traveling around a circular course showers dust in a continual
fashon away from the track even though it is proceding at a constant speed.
If we try to generate a graph of current versus time the dust generated on a circular track is a constant i.e. then also the current
level on the graph must also be a constant value.

Now let us look at a current flow on a load on a antenna such as a coil
which is hellicaly wound.
We know that the phase will be constant around the first loop but in this
case we have added inductance and capacitance by virtue
of the close proximity of the next coil and the next coil e.t.c which varies
the impedance along the wire and thus rapidly effects
a movement away from a purely resistive impedance. This lead me into
separating the coils from each other by juxtaposition
so that inductances were not additive (I reversed the coil direction as
well as positioning them apart.)
Since all these coils are connected in series one must hope for a
intercoupling effect will bring the current down on these
vertical portions in the event that radiation from them are of the correct
choice, either additive or detractive.
Thus the project is repeated from what I have done in the past only this
time I am using numourus loops in the event that
resulting antenna height will be eye opening as well as very broad banded.
As a follow up the corregations on the loops will be
removed by laying on the surfaces a flat adhesived back aluminum tape(Ihave
no copper tape) To try and ascertain what changes
occur by having a smooth surface radiator
Well Hal there you have it, possibly to long, possibly everything is wrong
and again possibly hopeless to understand
but it the best I can do
Regards
Art

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:aAfUc.6730$3I1.3782@bignews5.bellsouth.net...
> Ok, so the acceleration is in the phase-shifting between the adjacent
coils
> ?
> If I interpret that correctly, then its not a 'real' acceleration, but a
> simulated acceleration - much like using pulsating DC to generate
simulated
> AC.
> If you could describe it in terms a normal dummy like myself could
> understand or at least draw a better picture, your theory may be taken
more
> seriously.
> You say Roy's word is not good enough - But Roy has demonstrated his
> expertise in this area time and time again.
> I come here to learn from folks like Roy - and to inject some of my own
> thoughts from time to time.
> You come to the group asking for comments - and you got them.
> You did not speak in terms of technical details - so a reply using
technical
> details may not be deserved.
> There is no disgrace in asking questions (like you said) - but rejecting
> expert opinions can be seen as a disgrace in some instances.

>
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:dJeUc.269797$%_6.33856@attbi_s01...
> > Hi Hal, nice to meet you
> > What I have is not really a prposition or a legitimate theory, it is
just>

2073. HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 19:09:02 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <iV6Vc.7027$3O3.6810@newsread2.news.pas.earthlink.net>
Source record: 90694

Hi, Gentlemen -

I have an HP 8405A Vector Voltmeter. I have the App Note "Measuring Complex Impedance" by HP (thanks to Wes Stewart). I have made a few measurements following (maybe) the HP paper. I have probably been sloppy with the setup and procedure because I came up with a negative resistance a couple of times.

The HP paper discusses negative resistance but does not mention where one would encounter it. I assume it would normally be associated with active device measurements. Is this true? If I measure a (passive) load and find that the resistance is negative, shouldn't I doubt my setup and/or procedure? Is there any condition where a passive, real-world, network could show a negative resistance?

By the way, I have not gotten a negative resistance reading while using a dual directional coupler. I have gotten the negative resistance reading only when using the power splitter method. So far.

Thanks for any insight on this.

John KD5YI

2074. vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 19:59:59 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com>
Source record: 90695

I am planning to construct a vertical dipole array for 20m. The electrical calculations are complete (with help from LB Cebik) and now I'm looking for some advice on the physical construction. I'd like to use Al tubing and find unfortunately that this is difficult to come by locally. I will likely obtain this then from Texas Towers and therefore the tubing lengths will be limited to 6 ft each. They do offer nesting sizes so the real question is what diameter to utilize for the lower most 6 ft segment (dipole being some 34 ft or so). Recalling the approx dimensions of commercial vert antennas I've had in the past leads me to believe that 1.25" or so would be sufficient. Comments/advice ?? I would like to do this without guys if possible and plan on attaching the lower-most segments to 4x4's. Thanks in advance all.

Gary

2075. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 20:26:59 UTC
From: manuka@orcon.net.nz
Message-ID: <dd8572bb.0408191226.7577b0a0@posting.google.com>
Source record: 90696

Chip - "cooking " is right ! We're "reflecting" on a small front screen to enhance illumination in fact. Of course mesh parabolas typically only have 80% of the gain of a solid dish, but extensive field trials have verified ~15dB for the 300mm (12") mesh scoop at 2.4GHz, & ~10dB for a 170mm at the same freq.At say 1800MHz cellular freqs, gain only perhaps 2/3rd this =10dB for 12"?

Ref numerous pix & lab. notes => www.usbwifi.orcon.net.nz to support things

Stan (ZL2AJZ)

2076. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 21:05:55 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <HC8Vc.17199$rd5.4365@bignews6.bellsouth.net>
Source record: 90697

I've used EMT (Electrical Metallic Tubing) also called 'Thinwall conduit'
available from Lowes, etc electrical dept.
another (more expensive) option = copper tubing.
If you have an electrical supply nearby - then Aluminum Counduit may be a
good choice - it comes with threaded couplings.... which you should use
Penetrox on - by the way.
My 2 cents worth =
HEY ! what happened to the "Cents" key there's a "$" key - but no cents.

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com...
> I am planning to construct a vertical dipole array for 20m. The
> electrical calculations are complete (with help from LB Cebik) and now
> I'm looking for some advice on the physical construction. I'd like to
> use Al tubing and find unfortunately that this is difficult to come by
> locally. I will likely obtain this then from Texas Towers and therefore
> the tubing lengths will be limited to 6 ft each. They do offer nesting
> sizes so the real question is what diameter to utilize for the lower
> most 6 ft segment (dipole being some 34 ft or so). Recalling the approx
> dimensions of commercial vert antennas I've had in the past leads me to
> believe that 1.25" or so would be sufficient. Comments/advice ?? I
> would like to do this without guys if possible and plan on attaching the
> lower-most segments to 4x4's. Thanks in advance all.
>
> Gary

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2077. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 21:10:39 UTC
From: "aunwin@insightbb.com"
Message-ID: <jH8Vc.190274$eM2.61634@attbi_s51>
Source record: 90698

Gary, I have stopped using aluminum tubes a long time ago preferring
to use alumimum tape on fishing poles and the like
For what you are doing I recommend purchasing fibre glass poles on EBay
which are government surplus. These come in just short of 4 feet
and slide into each other.
They are about 1/8 thick walls and about 2" diameter. You can overtape these
with sticky back aluminum
tape that you can purchase at any hardwaer store. As for guys I always feel
comfortable
when I have those especially for steadying things during construction and
removal.
I think I paid about $40 for mine which was 40foot total length.
(P.S. you can scrape the tape off if you designed it to long!)
Regards
Art

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com...
> I am planning to construct a vertical dipole array for 20m. The
> electrical calculations are complete (with help from LB Cebik) and now
> I'm looking for some advice on the physical construction. I'd like to
> use Al tubing and find unfortunately that this is difficult to come by
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> the tubing lengths will be limited to 6 ft each. They do offer nesting
> sizes so the real question is what diameter to utilize for the lower
> most 6 ft segment (dipole being some 34 ft or so). Recalling the approx
> dimensions of commercial vert antennas I've had in the past leads me to
> believe that 1.25" or so would be sufficient. Comments/advice ?? I
> would like to do this without guys if possible and plan on attaching the
> lower-most segments to 4x4's. Thanks in advance all.
>
> Gary

2078. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 21:16:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nv5ai014q1oig1280jj81hfij9i1ji6rcl@4ax.com>
Source record: 90699

On Thu, 19 Aug 2004 17:05:55 -0400, "Hal Rosser"
<hmrosser@bellsouth.net> wrote:

>HEY ! what happened to the "Cents" key there's a "$" key - but no cents.
You shoulda bought an Underwood Personal Computer - just my 2ï¿½ worth.

2079. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 21:27:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2okk8rFc24eeU1@uni-berlin.de>
Source record: 90700

"The other John Smith" <jocjo-john@yooha.com> wrote
>Is there any condition where a passive, real-world, network
>could show a negative resistance?

"Negative towers' exist in some MW broadcast directional arrays. Here is a link to a paper about it: http://www.qsl.net/km5kg/negative.htm. Don't know if that addresses your situation or not...

RF

2080. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 21:39:52 UTC
From: "aunwin@insightbb.com"
Message-ID: <I69Vc.190365$eM2.99299@attbi_s51>
Source record: 90701

P.S. They also had aluminum forms that cast around $10
more
Art
"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:jH8Vc.190274$eM2.61634@attbi_s51...
> Gary, I have stopped using aluminum tubes a long time ago preferring
> to use alumimum tape on fishing poles and the like
> For what you are doing I recommend purchasing fibre glass poles on EBay
> which are government surplus. These come in just short of 4 feet
> and slide into each other.
> They are about 1/8 thick walls and about 2" diameter. You can overtape
these
> with sticky back aluminum
> tape that you can purchase at any hardwaer store. As for guys I always
feel
> comfortable
> when I have those especially for steadying things during construction and
> removal.
> I think I paid about $40 for mine which was 40foot total length.
> (P.S. you can scrape the tape off if you designed it to long!)
> Regards
> Art
>
> "Angela & Gary" <gmbelcas@charter.net> wrote in message
> news:gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com...
> > I am planning to construct a vertical dipole array for 20m. The
> > electrical calculations are complete (with help from LB Cebik) and now
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> > use Al tubing and find unfortunately that this is difficult to come by
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> > sizes so the real question is what diameter to utilize for the lower
> > most 6 ft segment (dipole being some 34 ft or so). Recalling the approx
> > dimensions of commercial vert antennas I've had in the past leads me to
> > believe that 1.25" or so would be sufficient. Comments/advice ?? I
> > would like to do this without guys if possible and plan on attaching the
> > lower-most segments to 4x4's. Thanks in advance all.
> >
> > Gary
>
>

2081. Re: Vertical antenna construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 22:26:14 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <9O9Vc.282679$a24.12162@attbi_s03>
Source record: 90702

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com...
>
>I am planning to construct a vertical dipole array for 20m. The
> electrical calculations are complete (with help from LB Cebik) and now
> I'm looking for some advice on the physical construction. I'd like to
> use Al tubing and find unfortunately that this is difficult to come by
> locally. I will likely obtain this then from Texas Towers and therefore
> the tubing lengths will be limited to 6 ft each. They do offer nesting
> sizes so the real question is what diameter to utilize for the lower
> most 6 ft segment (dipole being some 34 ft or so). Recalling the approx
> dimensions of commercial vert antennas I've had in the past leads me to
> believe that 1.25" or so would be sufficient. Comments/advice ?? I
> would like to do this without guys if possible and plan on attaching the
> lower-most segments to 4x4's. Thanks in advance all.
>
> Gary

Gary -

Here are some suggestions.

1. Texas Towers is a good known supplier, but you can also get 8 and 12 feet lengths of 6061 Aluminum tubing.

2. I talked to Charles Penninger, KC9DAO (St. Charles, IL) last weekend. He does carry 6061 aluminum tuning in the 8' & 12' lengths and can perform custom machining -- if you require.

His "Clamp-It" series of mast clamps may be of interest for your design.
http://www.penninger.com/prod01.htm

His web site is just being developed
http://www.penninger.com/

3. DX Engineering has a number of appropriate parts (radio support block clamps - up to 2" diameter), depending upon how you wish to construct the verticals or attach them to a wooden 4x4.
http://www.dxengineering.com/default.asp?DeptID=6

4. Array Solutions - 41' monster
http://www.arraysolutions.com/Products/asvd41-fs.htm

5. Cal-AV Labs vertical antennas is an approach to study (full sized 1/4 waves)
http://www.arraysolutions.com/Products/cal-av_vfseries.htm

6. Don't forget a static bleeder choke
http://www.arraysolutions.com/Products/staticsurgecoils.htm

A 20 meter field day antenna
http://www.kn5l.net/fdantenna/

w9gb

2082. Help! Amateur Requesting Antenna Assistance.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 22:57:47 UTC
From: Richard Mosier <delgrene@a-znet.com>
Message-ID: <xXoVc.21$n37.8@fe39.usenetserver.com>
Source record: 90627

To all: I am a amateur SWL and request your expertise with antennas. I currently own a desktop receiver attached to an indoor active antenna. While this setup works alright, I would prefer to try my luck with a traditional longwire antenna. Can anyone answer the following questions?

1. Is there any real difference in reception quality if a string a longwire through my attic compared to running it from the chimney to a tree?

2. If placed in my attic, do I need to 'slope' it downward through the rafters?

3. My current active antenna is a MFJ 1020B. Is it possible to convert this into a antenna tuner by removing the vertical antenna currently attached to it and running the longwire antenna lead into the 1020B, then running a coaxial connection from the 1020B to the back of the receiver?

Thanks for all your help and I would appreciate any product recommendations.

RM

2083. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 23:07:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iacmcu0kdt37@corp.supernews.com>
Source record: 90703

I see from my records that you have EZNEC. Open EZNEC example file
4square.ez, and click Src Dat. You'll see that element 1 has a negative
resistance. In the main EZNEC window, open the File menu, then click
Edit Current Antenna Notes. This contains an explanation of the
phenomenon. It can happen only when there are multiple sources, since
the power to create the negative resistance at one source comes from
power supplied by others. If you use a feed system to distribute power
to various elements from a single source, the resistance at that source
can never be negative.

Active devices can also exhibit a negative resitance, but again, there
has to be some source of power, since a negative resistance sources
power to whatever is connected to it.

Your result could be due to measurement error, erroneous setup or
procedure, or, if you're measuring an antenna, RF on the antenna from
outside sources. The latter makes antenna impedance measurement
difficult without a sharply tuned detector, which the 8405A doesn't have.

Roy Lewallen, W7EL

The other John Smith wrote:

> Hi, Gentlemen -
>
> I have an HP 8405A Vector Voltmeter. I have the App Note "Measuring Complex
> Impedance" by HP (thanks to Wes Stewart). I have made a few measurements
> following (maybe) the HP paper. I have probably been sloppy with the setup
> and procedure because I came up with a negative resistance a couple of
> times.
>
> The HP paper discusses negative resistance but does not mention where one
> would encounter it. I assume it would normally be associated with active
> device measurements. Is this true? If I measure a (passive) load and find
> that the resistance is negative, shouldn't I doubt my setup and/or
> procedure? Is there any condition where a passive, real-world, network could
> show a negative resistance?
>
> By the way, I have not gotten a negative resistance reading while using a
> dual directional coupler. I have gotten the negative resistance reading only
> when using the power splitter method. So far.
>
> Thanks for any insight on this.
>
> John KD5YI
>

>

2084. Re: Vertical antenna construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-19 23:17:20 UTC
From: "aunwin@insightbb.com"
Message-ID: <4yaVc.40601$mD.33194@attbi_s02>
Source record: 90704

Enjoyed this post and links
Art
"G.Beat" <now9spamgb@no.comcast.spam.net> wrote in message
news:9O9Vc.282679$a24.12162@attbi_s03...
> "Angela & Gary" <gmbelcas@charter.net> wrote in message
> news:gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com...
> >
> >I am planning to construct a vertical dipole array for 20m. The
> > electrical calculations are complete (with help from LB Cebik) and now
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> > most 6 ft segment (dipole being some 34 ft or so). Recalling the approx
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> > believe that 1.25" or so would be sufficient. Comments/advice ?? I
> > would like to do this without guys if possible and plan on attaching the
> > lower-most segments to 4x4's. Thanks in advance all.
> >
> > Gary
>
> Gary -
>
> Here are some suggestions.
>
> 1. Texas Towers is a good known supplier, but you can also get 8 and 12
feet
> lengths of 6061 Aluminum tubing.
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> 2. I talked to Charles Penninger, KC9DAO (St. Charles, IL) last weekend.
> He does carry 6061 aluminum tuning in the 8' & 12' lengths and can perform
> custom machining -- if you require.
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> http://www.penninger.com/prod01.htm
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> His web site is just being developed
> http://www.penninger.com/
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> 3. DX Engineering has a number of appropriate parts (radio support block
> clamps - up to 2" diameter), depending upon how you wish to construct the
> verticals or attach them to a wooden 4x4.
> http://www.dxengineering.com/default.asp?DeptID=6

>
> 4. Array Solutions - 41' monster
> http://www.arraysolutions.com/Products/asvd41-fs.htm
>
> 5. Cal-AV Labs vertical antennas is an approach to study (full sized 1/4
> waves)
> http://www.arraysolutions.com/Products/cal-av_vfseries.htm
>
> 6. Don't forget a static bleeder choke
> http://www.arraysolutions.com/Products/staticsurgecoils.htm
>
> A 20 meter field day antenna
> http://www.kn5l.net/fdantenna/
>
> w9gb
>
>
>

2085. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 00:17:12 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <cqbVc.3254$2L3.1187@newsread3.news.atl.earthlink.net>
Source record: 90705

> Active devices can also exhibit a negative resitance, but again, there
> has to be some source of power, since a negative resistance sources
> power to whatever is connected to it.
>
>

I was thinking the neon lamp could display negative resistance at certain
voltage/current ranges. The tunnel diode can also.
Not sure right off it they are active devices or not without looking at some
old information I have.

2086. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 01:08:11 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <%9cVc.7344$3O3.2577@newsread2.news.pas.earthlink.net>
Source record: 90706

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10iacmcu0kdt37@corp.supernews.com...
> I see from my records that you have EZNEC. Open EZNEC example file
> 4square.ez, and click Src Dat. You'll see that element 1 has a negative
> resistance. In the main EZNEC window, open the File menu, then click
> Edit Current Antenna Notes. This contains an explanation of the
> phenomenon. It can happen only when there are multiple sources, since
> the power to create the negative resistance at one source comes from
> power supplied by others. If you use a feed system to distribute power
> to various elements from a single source, the resistance at that source
> can never be negative.

Okay. I have only the one source, so I should never see a negative
resistance is what I read from your reply.

> Active devices can also exhibit a negative resitance, but again, there
> has to be some source of power, since a negative resistance sources
> power to whatever is connected to it.

Yes. That's why I made sure I mentioned passive. I meant no active devices.

> Your result could be due to measurement error, erroneous setup or
> procedure, or, if you're measuring an antenna, RF on the antenna from
> outside sources. The latter makes antenna impedance measurement
> difficult without a sharply tuned detector, which the 8405A doesn't have.

Error was my assumption as well. Thanks for your input, Roy. I'll take a
look at EZNEC as you suggested.

John

> Roy Lewallen, W7EL
>
> The other John Smith wrote:
>
> > Hi, Gentlemen -
> >
> > I have an HP 8405A Vector Voltmeter. I have the App Note "Measuring
Complex
> > Impedance" by HP (thanks to Wes Stewart). I have made a few measurements
> > following (maybe) the HP paper. I have probably been sloppy with the
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> > and procedure because I came up with a negative resistance a couple of
> > times.
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> > The HP paper discusses negative resistance but does not mention where

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> > would encounter it. I assume it would normally be associated with active
> > device measurements. Is this true? If I measure a (passive) load and
find
> > that the resistance is negative, shouldn't I doubt my setup and/or
> > procedure? Is there any condition where a passive, real-world, network
could
> > show a negative resistance?
> >
> > By the way, I have not gotten a negative resistance reading while using
a
> > dual directional coupler. I have gotten the negative resistance reading
only
> > when using the power splitter method. So far.
> >
> > Thanks for any insight on this.
> >
> > John KD5YI
> >
> >

2087. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 01:12:31 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <3ecVc.28193$9Y6.13478@newsread1.news.pas.earthlink.net>
Source record: 90707

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:cqbVc.3254$2L3.1187@newsread3.news.atl.earthlink.net...
> > Active devices can also exhibit a negative resitance, but again, there
> > has to be some source of power, since a negative resistance sources
> > power to whatever is connected to it.
> >
> >
>
> I was thinking the neon lamp could display negative resistance at certain
> voltage/current ranges. The tunnel diode can also.
> Not sure right off it they are active devices or not without looking at
some
> old information I have.

Hi, Ralph -

Yes, I am familiar with tunnel diodes from way back in the 60's. They were GE devices as I recall. In fact, until about 10 years ago, I had an even older schematic from an EDN magazine article that showed how to connect two NPN transistors together to emulate a tunnel diode. Looked sort of like a bistable connection, as I recall.

Anyway, that's why I limited my statements to passive devices although, as Roy pointed out, I did not state that I had only one source.

Thanks.

John

2088. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 01:13:04 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <AecVc.28194$9Y6.21046@newsread1.news.pas.earthlink.net>
Source record: 90708

"Richard Fry" <rfry@adams.net> wrote in message
news:2okk8rFc24eeU1@uni-berlin.de...
> "The other John Smith" <jocjo-john@yooha.com> wrote
> >Is there any condition where a passive, real-world, network
> >could show a negative resistance?
> ------------
>
> "Negative towers' exist in some MW broadcast directional arrays. Here is
a
> link to a paper about it: http://www.qsl.net/km5kg/negative.htm. Don't
> know if that addresses your situation or not...
>
> RF

Thanks, Richard. I'll take a look.

John

2089. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 02:11:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iane5ionbfe0f@corp.supernews.com>
Source record: 90709

To test a device, connect a resistor to its terminals. If the resistor gets warm, you have a negative resistance.

The neon lamp and tunnel diode exhibit a negative *dynamic* resistance. That it, the *slope* of the V/I curve is negative at some parts of the range. They don't exhibit a true negative resistance -- that is, under no conditions will you find the value of V/I to be negative.

Roy Lewallen, W7EL

Ralph Mowery wrote:
>
> I was thinking the neon lamp could display negative resistance at certain
> voltage/current ranges. The tunnel diode can also.
> Not sure right off it they are active devices or not without looking at some
> old information I have.
>
>
>
>

2090. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 02:47:28 UTC
From: CW <"no adddress"@spam>
Message-ID: <L-Sdna2Vhvfc-7jcRVn-hQ@comcast.com>
Source record: 90710

Why, the terms "electromagnetic" and "pulse" should be common knowledge to
anyone that has any interest in this group.

"Dave Holford" <mylastname@.deletethis.sympatico.ca> wrote in message >
Google "EMP Test"
>
> Dave

2091. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 03:00:18 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <6PdVc.25625$Kf4.9008@nwrddc02.gnilink.net>
Source record: 90711

. Of course mesh parabolas
> typically only have 80% of the gain of a solid dish,

I would seriously doubt the veracity of this statement and would be gratified to see valid documented evidence of this. If the mesh openings are under 0.1 lambda the mesh will appear solid. The problem may be achieving good surface accuracy with a mesh dish.Those of us using mesh dishes on 1296 MHz EME are seeing excellent efficiencies with mesh surfaces-ultimately limited by the ability to properly illuminate the surface. For EME we tend to underilluminate the surface to take advantage of lower side lobes and less spill over, which means "seeing" less warm earth noise.

Dale W4OP

2092. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 03:42:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4125748a_3@corp.newsgroups.com>
Source record: 90712

Doug Goncz wrote:
> I have 36 years of experience soldering.

Don't worry, Doug, your apprenticeship will be up soon.

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2093. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 03:45:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41257546$1_3@corp.newsgroups.com>
Source record: 90714

Angela & Gary wrote:
> I will likely obtain this then from Texas Towers and therefore
> the tubing lengths will be limited to 6 ft each. They do offer nesting
> sizes so the real question is what diameter to utilize for the lower
> most 6 ft segment (dipole being some 34 ft or so).

Texas Towers has a computer program that will give you the information.
Guyed elements are a lot more economical than non-guyed elements.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2094. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 03:48:31 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <412576ec_4@news1.prserv.net>
Source record: 90713

We had to stop using 8405s in the field many years ago due to the external RF problem Roy describes. Many of the newer analyzers use synchronous detection which reduces the problem, unless the RF signal level from the antenna exceeds the dynamic range of the instrument. Put a wideband power meter or true RMS RF voltmeter at the measurement terminals and see how much voltage/power is there from your antenna. You may have to wait for a blackout to make measurements if the RF is from sky wave signals. If it is ground wave from MW broadcast stations, move.

--
Crazy George
Remove N O and S P A M imbedded in return address

2095. Re: BCB DX Web site ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 05:45:14 UTC
From: Charlesh3@aol.com
Message-ID: <0pidnarr7rVpErjcRVn-vg@giganews.com>
Source record: 90715

Try the National Radio Club at www.nrcdxas.org .

Chuck

2096. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 05:52:47 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <2k3bi0dsget0ar3400f2vg0gv8a4hn22gf@4ax.com>
Source record: 90716

On 19 Aug 2004 14:29:13 GMT, dgoncz@aol.com (Doug Goncz) wrote:

>Dear Richard,
>
>You have my thanks for your reply.
>
>>From: Richard Clark kb7qhc@comcast.net
>
>>Sounds like you need more practice soldering. All this scraping you
>>describe is unnecessary because you should already have bare metal.
>
>I have 36 years of experience soldering.
>
>Have you tried tinning Radio Shack's 274-284 connector? It acts as if it's made
>of stainless steel. Maybe a chisel tip would work better.

Doug,
I too have found that RatShack audio connectors do not take to solder
well. Not always, perhaps a quarter to a third of the ones I've used.
A narrow chisel tip has worked well for me as has going to one of the
diminishing number of electronics supply shops for my parts. However,
I realize not every area has such a place. If you have a Fry's
Electronics store in your area it is worth looking there for both
audio and RF connectors as well as soldering equipment - pick out a
few different tips

Howard

2097. Antenna for 160 meters, Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 06:52:32 UTC
From: bayou50@hotmail.com
Message-ID: <354acd72.0408192252.7dcdb3b3@posting.google.com>
Source record: 90717

Hello all, this is my first time posting to this group. I would like to try 160 meters this winter and was trying to get some ideas on what type of antenna I should use. Let me tell you about my lay out first, My lot is 100ft. wide by 800ft
Deep. Of that I can use about 400 feet of it to hang an antenna. I now have a 136 ft. OCF windom up about 45 feet, and it works great on 80m-40m-20m-17m-12m and 10m. I only us the tuner on my TS-940SAT to tune my OCF windom with no problems. I was thinking about putting up a 160 meter dipole. If I would hang a 160 meter dipole up 136 feet or so of it would run next to the OCF windom that is up now, at least within 50 ft. of it. But I could get the 160 meter dipole up maybe 10 or more feet above the windom. Would this be ok? Are there any other antennas that might do the job? I have alot of trees on my land. Any ideas are welcome. Thanks, Dale

2098. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 07:33:58 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408192333.7ce6a53b@posting.google.com>
Source record: 90718

Richard Clark <kb7qhc@comcast.net> wrote in message news:

> Returning to the issue of lightning, I would suggest you mine the
> archives of rec.radio.amateur.antenna for Richard Harrison, KB5WZI

More silly musings:

I read, among other things, that the advice to introduce a coax shield RF choke as lightning protection has been dropped, mostly on the grounds that a choke is an EMP pickup.
Hmmmm... That applies to a helical wound inductor, not an isotropically near-deaf winding like a toroid.
In turn, a single-layer toroid winding would offer a flashover point between the hot and cold ends of the winding.

OTOH if the inductor is made
- with a couple of windings on straight drainpipe
- electrically in series
- axes parallel
- oppositely oriented
- spaced enough to reduce mutual inductance (say, one yard or more),
what you get is high insulation, no flashover point, limited pulse pickup (as long as the distance between the windings is << that the distance between them and the putative pulse source).

Another trick would be to make it a single shielded winding.
(Insert warning about inductively shorted winding here -->)

Yet another would be the SPL, the satanist pentagonal layout. It's like a toroid, cept the winding is split in 5 parts, each in the middle of the 3-foot side of a pentagon. The two ends are kept well apart, of course. A weatherproof chandelier is to be lit in the middle as storms approach.

Sounds like fun.

If I find the inspiration I'll put in a phase canceling split-winding choke.

2099. T2FD: keeping the spreaders in place

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 08:58:14 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408200058.f5b8abf@posting.google.com>
Source record: 90719

On my T2FD I used 1/2" electrical plastic pipe for spreaders.

The wire is rather thick: 4 mm^2 conductor section, stranded,
PVC-insulated.

At the moment, spreaders are tied in place with copper telephone
twisted pair.

I am planning to fill the pipes with urethane foam to keep water - and
especially the bugs - out of them.

Urethane should also bond well with the PVC insulation on wires,
allowing me to remove the ugly twisted pair, but I am not sure.

How do you suggest to keep the spreaders in place?

tnx es 73 de n1jpr/i2
http://filippo.ru.ru

2100. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 09:19:00 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408200119.45d68e11@posting.google.com>
Source record: 90720

In the 1920's and 1930's there were scores of people
claiming to "hear radio in [their tooth cavity] fillings".

Today, we have more people in more countries with more tooth fillings
near more (and more powerful) transmitters than ever before, yet
nobody claims to hear radio in their teeth. The focus has shifted to
other, more fashionable sources of radiation, such as cellphones.

It all boils down to whether low-level, non-ionizing radiation has any
effect at the molecular level or not.

Conventional wisdom had it that being that radiation non-ionizing, if
its intensity was short of sufficient for inducing macroscopic
heating, it would not be harmful. On the other hand, heating had long
been tied to cataracts and male sterility, and of course to burns.

In recent years, it was discovered that many birds had the capability
to convert the earth magnetic field into electrochemical nerve
signals. As microscopic magnetic crystals were found in birds' brains
(and later in humans' brains as well), speculation is now focusing on
the possibility that physical effects may have some heretofore
unnnoticed chemical impact too.

Bad statistical manipulation is easy to spot, bad data much less so.
As an RF addict and a statistics aesthete, I hope research will
continue, but I am not terribly concerned.

2101. Re: keeping the spreaders in place

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 09:22:22 UTC
From: "Edward A. Feustel" <efeustel@direcway.com>
Message-ID: <4125c15f$1_2@127.0.0.1>
Source record: 90621

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0408200058.f5b8abf@posting.google.com...
> On my T2FD I used 1/2" electrical plastic pipe for spreaders.
>
> The wire is rather thick: 4 mm^2 conductor section, stranded,
> PVC-insulated.
>
> At the moment, spreaders are tied in place with copper telephone
> twisted pair.
>
> I am planning to fill the pipes with urethane foam to keep water - and
> especially the bugs - out of them.
>
> Urethane should also bond well with the PVC insulation on wires,
> allowing me to remove the ugly twisted pair, but I am not sure.
>
> How do you suggest to keep the spreaders in place?
>
> tnx es 73 de n1jpr/i2

In the open line I bought, slits are cut in the ends of the plastic tubing.
The wire used is insulated and slightly greater diameter than the slits.
Thus friction holds the wire in place.
Ed, N5EI

> http://filippo.ru.ru
>

2102. Re: Antenna for 160 meters, Any Ideas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 10:17:57 UTC
From: Peter Parker <parkerp@NOSPAMalphalink.com.au>
Message-ID: <4125ce5d@news.alphalink.com.au>
Source record: 90622

"Dale" <bayou50@hotmail.com> wrote in message
news:354acd72.0408192252.7dcdb3b3@posting.google.com...

Hi Dale - most important is the distances you want to work and your available space.

If you want local groundwave or far DX then go for a top loaded vertical (or tower) with a good ground system (maybe supplemented by a low noise receiving antenna, eg loop or Beverage).

You need the vertical component for groundwave and low angle for DX.

If you want medium distances (100-500km?), then some sort of dipole or endfed would be fine. But this same setup would be lousy for local (little groundwave) or DX (straight up angle of radiation).

An inverted L is a good all-purpose antenna, provide the vertical bit is fairly long.

And me? I'm confined to an indoor magnetic loop for 160m, just 1.4m diameter!

73, Peter VK3YE

http://www.qsl.net/vk3ye

2103. Re: William Fanckboner, W9INN, SK

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 13:05:56 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <UGmVc.286201$a24.7808@attbi_s03>
Source record: 90623

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message
news:aa5vuNOSPAM-974BFD.17094617082004@newssvr22-ext.news.prodigy.com...
> Butch,
>
> The full ARRL blurb said something about the daughter sending refunds
> to back orders that the business is closed. I did not save the full
> text.
>
> Dick, aa5vu
>

Yes, I also read this. When you consider the number of firms in the
Chicago area that could have handled this business -- this is another loss
for our area.

Greg, w9gb

2104. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 13:10:10 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <877jrudkgd.fsf@qmc.ph.msstate.edu>
Source record: 90624

>I am planning to construct a vertical dipole array for 20m. The
>electrical calculations are complete (with help from LB Cebik) and now
>I'm looking for some advice on the physical construction. I'd like to

Here's one link:

http://k7nv.com/notebook/id3.htm

For 20m (unguyed), the base can be thinner than 1.25". To get an idea,
look at the taper schedule for 20m yagi elements...there the center
section is often 1" or even 7/8".

Torsten
N4OGW

2105. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 13:14:45 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <9PmVc.7697$3O3.3047@newsread2.news.pas.earthlink.net>
Source record: 90625

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message
news:412576ec_4@news1.prserv.net...
> We had to stop using 8405s in the field many years ago due to the external
> RF problem Roy describes. Many of the newer analyzers use synchronous
> detection which reduces the problem, unless the RF signal level from the
> antenna exceeds the dynamic range of the instrument. Put a wideband power
> meter or true RMS RF voltmeter at the measurement terminals and see how
much
> voltage/power is there from your antenna. You may have to wait for a
> blackout to make measurements if the RF is from sky wave signals. If it
is
> ground wave from MW broadcast stations, move.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address

Hi, George -

Thanks for your comments. But, I don't understand how external RF would
cause the problem for the following reasons:

1. My measurements were at about 460 mHz.

2. The nearest broadcast stations were 10 miles away. One AM station and one
FM station.

3. The Vector Voltmeter showed loss of lock when the signal generator's
signal was attenuated.

4. The Vector Voltmeter is not wideband. Here is what HP says about
bandwidth and sensitivity:

"3-16. Phase and amp1itude measurements can be
made at any frequency between 1 and 1000 MHz. However,
the Vector Voltmeter IS frequency selective and
therefore must be tuned to input signals. Tuning is
semi-automatic with manual coarse tuning and automatic
fine tuning. The automatic function tunes both
c hanne1s simultaneously to the channel A signal.
Thus, channel A signal determines the frequency at
which measurements are made.
3-17. A condition for tuning is that channel A be large
enough to trigger tuning. Minimum required channel
A amplitude is frequency dependent as follows: 1.5 mV
for 1-10 MHz, 300 µV for 10-500 MHz, and 500 µV

for 500-1000 MHz.
3-18. The Vector Voltmeter is a tuned device with a very narrow passband (-1 kHz) at the measurement frequency. Therefore, measurements can be made on complex waveforms, and amplitude-modulated signals as well as sinusoidal signals. Pulse modulated signals, however, cannot be measured as the 8405A cannot tune to an intermitten s.ignal."

The 8405 would be unable to lock onto any frequency below about 200 MHz (IIRC) due to the setting on the coarse frequency control at the time.

I readily accept the fact that my technique was sloppy and my results showed it. I just hope it was not due to an outside source. I can't afford to move.

But, I am new to this. My naive reasoning may be flawed. I would appreciate any further comments on this.

Thanks.

John

2106. Re: keeping the spreaders in place

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 14:19:31 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <TLnVc.158408$8_6.46246@attbi_s04>
Source record: 90626

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0408200058.f5b8abf@posting.google.com...
> On my T2FD I used 1/2" electrical plastic pipe for spreaders.
>
> The wire is rather thick: 4 mm^2 conductor section, stranded,
> PVC-insulated.
>
> At the moment, spreaders are tied in place with copper telephone
> twisted pair.
>
> I am planning to fill the pipes with urethane foam to keep water - and
> especially the bugs - out of them.
>
> Urethane should also bond well with the PVC insulation on wires,
> allowing me to remove the ugly twisted pair, but I am not sure.
>
> How do you suggest to keep the spreaders in place?
>
> tnx es 73 de n1jpr/i2
> http://filippo.ru.ru

It depends on the "orientation" you desire the parallel wires.
If you wish for them to be vertically aligned, then a small weight (e.g.,
lead fishing weight)
at one end of the spreader helps to keeps the wires aligned.

w9gb

2107. Adding/Splicing Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 15:37:55 UTC
From: Gary Boyer <gboyer@columbus.rr.com>
Message-ID: <nVoVc.28640$cT6.10177@fe2.columbus.rr.com>
Source record: 90628

I need to add some additional ladder line to an existing antenna....the ladder line I am using is the heavy duty stuff...it is a very difficult to splice this stuff..does anyone have any suggestions to make this job a bit easier...I am having allot of trouble just making a mechanical connection...thanks....Gary...K8BY

--

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2108. Re: Help! Amateur Requesting Antenna Assistance.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 16:07:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kj7ci0t6j96tqedp5ihlv5jo7uaamvngle@4ax.com>
Source record: 90629

On Thu, 19 Aug 2004 18:57:47 -0400, "Richard Mosier"
<delgrene@a-znet.com> wrote:
>1. Is there any real difference in reception quality if a string a longwire
>through my attic compared to running it from the chimney to a tree?

Some. Depends on frequency and length (comparable to wavelength).
This is not as important as it is in getting away from the house as a
source of noise. If you encounter no noise with an attic antenna,
then you are doing well.

>2. If placed in my attic, do I need to 'slope' it downward through the
>rafters?

No.

>3. My current active antenna is a MFJ 1020B. Is it possible to convert
>this into a antenna tuner by removing the vertical antenna currently
>attached to it and running the longwire antenna lead into the 1020B, then
>running a coaxial connection from the 1020B to the back of the receiver?

Hi Richard,

The manual is vague here. You can try it, certainly, but the
preselector may be overwhelmed by out of band AM signals (recognized
by a strange "deafness" to signals you should get), or it may
oscillate (the manual warns of this). If either occur, time to think
of obtaining or building a simple tuner.

73's
Richard Clark, KB7QHC

2109. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 16:42:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bi8ci0ljva6g4kukuiv3odlvqrrlqoqvmf@4ax.com>
Source record: 90630

On 20 Aug 2004 00:33:58 -0700, n1jpr@hotmail.com (SpamHog) wrote:

>More silly musings:

Hi OM,

I'll tell ya what.... Instead of musing, or re-inventing the wheel, you already have examples from others who went before you with this identical risk and obviously you think they solved it (or at least they dress like those who could).

Climb to the top of the building (you HAVE done this, haven't you?) and LOOK at those antennas and feed lines already there. Do they have this protection you fantasize about? Do they treat anything as ground? Do their lines tie to it?

Is there any evidence of lightning strikes? After all, according to reports here, the flicker of 100000A will melt unobtainium - is that tower sagging from recent bolts blasted against it? Are there any explosion marks and charring along those lines? Do you notice any heat stress fractures where the tower is mounted?

Look over the side, or visit the sidewalk below. Are their any puddles of slag or molten metal? Or is there any evidence of a fine metal particulate mist deposited along side the building (it will look glittery like Disco Makeup for a drag queen)?

No? Do you think they ignored the problem? (What are the chances anyway?) Do you think you will attract a problem they have never experienced? Ask yourself, what makes your antenna so much more attractive when the Eiffel Tower looms over it.

Well, of course there are the products of that near-nuclear EMP. Look around and see how well the occupants of the building survived this terrible act. Is there a high tenant turnover every season of lightning activity? Have you noticed a lot of hearses in the parking lot on occasion (which begs the question, why weren't you fitted into a box too)? When you took your trash out, were there piles of smoldering phones, computers, TVs, clock radios and Internet toasters filling the bins after a rain? The haphazard, zig-zag AC wiring you describe should guarantee these results to some degree - at least enough to reveal any one of these characteristics of catastrophic results.

Finally, and to answer the question why your antenna, and not the goliath above it; building those pentangle chokes may if fact incur a vengeful bolt delivered directly to you. Who knows, in this modern

age that religious metaphor may be embellished to a nuclear cruise missile to fulfill the prophecy of EMP. (Ah! Images of Monty Python's Holy Hand Grenade come to mind.)

Let us know how it turns out. ;-)

73's
Richard Clark, KB7QHC

2110. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 16:51:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <snaci0t5c60oiucb21jtb3l89u8c2fnukm@4ax.com>
Source record: 90631

On 20 Aug 2004 02:19:00 -0700, n1jpr@hotmail.com (SpamHog) wrote:

>Today, we have more people in more countries with more tooth fillings
>near more (and more powerful) transmitters than ever before, yet
>nobody claims to hear radio in their teeth.

All of the metal in my teeth has been replaced with composites or
capped. This shifts the resonance out of the AM band into the marine
band where there are fewer, less powerful transmitters nearby.

YMMV

73's
Richard Clark, KB7QHC

2111. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 17:57:16 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cg5e6f$3uv$1@newshost.mot.com>
Source record: 90633

Actually...

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:snaci0t5c60oiucb21jtb3l89u8c2fnukm@4ax.com...
> On 20 Aug 2004 02:19:00 -0700, n1jpr@hotmail.com (SpamHog) wrote:
>
> >Today, we have more people in more countries with more tooth fillings
> >near more (and more powerful) transmitters than ever before, yet
> >nobody claims to hear radio in their teeth.
>
> All of the metal in my teeth has been replaced with composites or
> capped. This shifts the resonance out of the AM band into the marine
> band where there are fewer, less powerful transmitters nearby.
>
> YMMV
>
> 73's
> Richard Clark, KB7QHC

I have many amalgam fillings and lived < 1 mile from a 50KW. station on 1160 Kc. (they were sending out kilocycles back then). The only thing that picked up un wanted signals was the house built-in intercom radio. You had WJJD about every 50KC on the dial. Of course a razor blade and a pair of earphones did pretty well too.

The state of Wisconsin has a rather good public radio network (also on the net). Saturday mornings there is a doctor's call-in show. A woman called in claiming that she _heard_ music coming from the mouth of her young son/daughter.
So there are claims...
And BTW. I have been working with RF for the last 30+ years and there are absolutely no side eff...f..f..f..ff..ec...t..t..s.

--
Steve N, K,9;d, c. i My email has no u's.

2112. Re: Help! Amateur Requesting Antenna Assistance.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 18:16:36 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <1tudnZqnmd1torvcRVn-iA@comcast.com>
Source record: 90632

> The manual is vague here. You can try it, certainly, but the
> preselector may be overwhelmed by out of band AM signals (recognized
> by a strange "deafness" to signals you should get), or it may
> oscillate (the manual warns of this). If either occur, time to think
> of obtaining or building a simple tuner.

I have this problem in the VHF band, due to a local broadcaster on 104.1
I use a stub filter, but in your case, at low frequencies, a series resonant
circuit would cut that down nicely.

2113. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 18:51:01 UTC
From: fractenna@aol.com
Message-ID: <20040820145101.25456.00003528@mb-m29.aol.com>
Source record: 90634

>
>
> . Of course mesh parabolas
>> typically only have 80% of the gain of a solid dish,
>
>I would seriously doubt the veracity of this statement and would be
>gratified to see valid documented evidence of this. If the mesh openings
>are under 0.1 lambda the mesh will appear solid. The problem may be
>achieving good surface accuracy with a mesh dish.Those of us using mesh
>dishes on 1296 MHz EME are seeing excellent efficiencies with mesh surfaces-
>ultimately limited by the ability to properly illuminate the surface. For
>EME we tend to underilluminate the surface to take advantage of lower side
>lobes and less spill over, which means "seeing" less warm earth noise.
>
>Dale W4OP
>
Hi Dale,

A wok has no focal 'point': it is not a true paraboloid. Its the imperfection
in shape, not mesh:-) Ergo the loss in aperture efficiency.

73,
Chip N1IR

2114. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 18:52:49 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-D62F24.11524920082004@comcast.dca.giganews.com>
Source record: 90635

> Angela & Gary wrote:
> > I will likely obtain this then from Texas Towers and therefore
> > the tubing lengths will be limited to 6 ft each. They do offer nesting
> > sizes so the real question is what diameter to utilize for the lower
> > most 6 ft segment (dipole being some 34 ft or so).
>
> Texas Towers has a computer program that will give you the information.
> Guyed elements are a lot more economical than non-guyed elements.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>

Yes, I have heard of the existence of such a program - unfortunately, the folks at Texas Towers have not. I emailed them approx 1 month ago without joy. Was this program free for the using? If so, can anyone forward it to me (or perhaps run a few numbers for me)?? Thanks again all for the excellent suggestions/links etc.

Gary

2115. A4S with A744

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 18:53:39 UTC
From: manu <manu.07@laposte.net>
Message-ID: <412648B3.2080407@laposte.net>
Source record: 90636

Hello
I have a A4S and A744 add-on kit for 40m.
I search a good measure for the Phone band
in europe.
Tnx for your info
73's
F6KZC

2116. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 19:14:57 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <l6jci01ueu7tv7brbs0936hes45oi8rq9n@4ax.com>
Source record: 90637

On Fri, 20 Aug 2004 13:14:45 GMT, "The other John Smith" <jocjo-john@yooha.com>
wrote:

>The 8405 would be unable to lock onto any frequency below about 200 MHz
>(IIRC) due to the setting on the coarse frequency control at the time.

This is true.

>I readily accept the fact that my technique was sloppy and my results showed
>it. I just hope it was not due to an outside source. I can't afford to move.
>
>But, I am new to this. My naive reasoning may be flawed. I would appreciate
>any further comments on this.
>
>Thanks.
>
>John

I use my 8405 extensively, have two of 'em, and I've never had any indications
of negative resistance. What are the meter indications that seem to indicate
negative resistance?

Walt, W2DU

2117. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 19:48:41 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <412657f3_3@news1.prserv.net>
Source record: 90638

What we encountered were dynamic range problems. The instrument operates as HP says, but if a strong enough interfering signal appears at an input, it overloads the first(usually) active device, causing various unwanted products to appear in band, and sometimes desensitizing the channel. Urban problem with many other radio services nearby, and it doesn't help to be under the landing path of USAF aircraft with their jammers still active either.

--
Crazy George
Remove N O and S P A M imbedded in return address

2118. Re: Adding/Splicing Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 19:53:53 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <4126592c_1@news1.prserv.net>
Source record: 90639

Go to the hobby store and get some thin wall brass tubing just large enough to fit over the conductors. Use about a 2" length on each side, and lots of solder. You will need to provide some mechanical support to prevent flexing at the joints, as there will be tremendous stress risers at the ends of the tubing. Impedance bump should be minimal, as the missing dielectric will be offset by the increased conductor diameter.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Gary Boyer" <gboyer@columbus.rr.com> wrote in message
news:nVoVc.28640$cT6.10177@fe2.columbus.rr.com...
> I need to add some additional ladder line to an existing antenna....the
> ladder line I am using is the heavy duty stuff...it is a very difficult
to
> splice this stuff..does anyone have any suggestions to make this job a bit
> easier...I am having allot of trouble just making a mechanical
> connection...thanks....Gary...K8BY
>
> --
>
>
> --
> "Are you still wasting your time with spam?...
> There is a solution!"
>
> Protected by GIANT Company's Spam Inspector
> The most powerful anti-spam software available.
> http://mail.spaminspector.com
>
>
>

2119. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 20:15:23 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <homci01rqa2296ockvgb495175cupnnbbc@4ax.com>
Source record: 90640

On Fri, 20 Aug 2004 14:48:41 -0500, "Crazy George" <muNnscOh@attSglPobaAl.nMet>
wrote:

>What we encountered were dynamic range problems. The instrument operates as
>HP says, but if a strong enough interfering signal appears at an input, it
>overloads the first(usually) active device, causing various unwanted
>products to appear in band, and sometimes desensitizing the channel. Urban
>problem with many other radio services nearby, and it doesn't help to be
>under the landing path of USAF aircraft with their jammers still active
>either.
Hi George,

I understand the situation you encountered, but as I understand the 'other
John's' situation, he was sufficiently far from strong RF fields such that there
would be no problem with dynamic range. My interest is what the meters showed on
his 8405 that would be recognized as negative resistance.

Walt, W2DU

2120. radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 21:26:14 UTC
From: Richard <translations@qdnet.pl>
Message-ID: <cg5qm4$42o$1@nemesis.news.tpi.pl>
Source record: 90641

Could someone tell me what the radiation angles of the following aerials (roughly) are:

Half wave dipole
Quarter wave verticle
Longwire

TIA,

Richard

2121. ladder line position wrt conductors?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 21:34:21 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2004.08.20.21.34.09.893325@fakeuniserve.com>
Source record: 90642

Have just installed a 135' doublet fed with 450ohm commercial ladderline. The position of the ladder line as it comes alongside the house and into the shack is currently very close to where the electrical service line comes in. Luckily I am not picking up any power line noise but I wonder how critical is it that I try to keep the ladderline away from the house and particularly conductive items? IF it is critial how far should I try to stand it off? Comments appreciated.

Larry VE7EA

--
****
to reply via email remove "fake"

2122. Re: ladder line position wrt conductors?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 21:40:34 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <mduVc.28938$9Y6.9761@newsread1.news.pas.earthlink.net>
Source record: 90643

Hi Larry
Back in the days of external TV antennas and 300 ohm twin lead,
the usual practice was to twist the line about 1 turn/foot to minimize
interactions with nearby conductors.
Additionally, the distance between the ladder line conductors is a good
measure, keep the line 10 or so, more is better, of that unit away from
other conductors.
73 es gud dx
H.
NQ5H

"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
news:pan.2004.08.20.21.34.09.893325@fakeuniserve.com...
> Have just installed a 135' doublet fed with 450ohm commercial ladderline.
> The position of the ladder line as it comes alongside the house and into
> the shack is currently very close to where the electrical service line
> comes in. Luckily I am not picking up any power line noise but I wonder
> how critical is it that I try to keep the ladderline away from the house
> and particularly conductive items? IF it is critial how far should I try
> to stand it off? Comments appreciated.
>
> Larry VE7EA
>
> --
> ********************************
> to reply via email remove "fake"
>

2123. Re: Attention: BCB-AM DX'ers FREE FREE all FREE

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 22:37:20 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <j5qdneNMCM-84LvcRVn-pQ@adelphia.com>
Source record: 90644

http://www.radio-locator.com/

2124. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 23:03:49 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10id1286og8t281@corp.supernews.com>
Source record: 90645
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

I do have 1 other option. I have some 50' trees that would stretch about
130' apart. The issue is they are about 200' from the shack. Can I run that
much coax?

KC1DI <elbc2@gwi.net> wrote in message
news:K6SdnUdT0MYKtr7cRVn-qQ@gwi.net...
> >>
> >>Hi Doug,
> >>
> >>I'm Running the Windom (OFCD) it identical to what your saying. but
> >>you'll find that the coax needs to come off the antenna in pretty much a
> >>90 degree angle. ohterwise you will end up with lots of fedline
> >>radiation which will cause problems in the shack.
> >>73 Dave kc1di
> >
> >
> > Can you give me an indication about how long a lead I need before
> > running the coax back toward the house and into the radio? I'm going
> > to run the coax up the house and out to the feedpoint.
> >
> > Doug
>
> Hi again Doug,
>
> Was out of town so did not get your question for a few days.
>
> You should run it away from the antenna at 90 degrees for about 1/4 wave
> if possible. on 80M that would be about 66 ft. but as far as you can
> in any event. some claim choke balun at 22' down the feedline works
> well Mine is about 30' then a choke balun then about 75' to the shack
> and it seem to work for me.
> 73 Dave
>

2125. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-20 23:40:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10id305etmcgfe2@corp.supernews.com>
Source record: 90646

All of these antennas radiate in all directions.

Roy Lewallen, W7EL

Richard wrote:

> Could someone tell me what the radiation angles of the following aerials
> (roughly) are:
>
> Half wave dipole
> Quarter wave verticle
> Longwire
>
> TIA,
>
> Richard
>
>

2126. Re: Adding/Splicing Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 00:05:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41269337_5@corp.newsgroups.com>
Source record: 90647

Gary Boyer wrote:
> I need to add some additional ladder line to an existing antenna....the
> ladder line I am using is the heavy duty stuff...it is a very difficult to
> splice this stuff..does anyone have any suggestions to make this job a bit
> easier...I am having allot of trouble just making a mechanical
> connection...thanks....Gary...K8BY

I use automotive crimp butt connectors. Some of them are tinned
and will accept solder.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2127. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 00:09:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41269427$1_5@corp.newsgroups.com>
Source record: 90649

Angela & Gary wrote:
> Yes, I have heard of the existence of such a program - unfortunately,
> the folks at Texas Towers have not. I emailed them approx 1 month ago
> without joy. Was this program free for the using? If so, can anyone
> forward it to me (or perhaps run a few numbers for me)?? Thanks again
> all for the excellent suggestions/links etc.

It's a program that they will run for you on their computer.
If you want a self-supporting 16.5 ft element, just ask what
materials you need for e.g. 90 mph.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2128. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 00:13:44 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <PaGdnbc-kf8kDrvcRVn-pQ@adelphia.com>
Source record: 90648

Fractenna wrote:
>>
>>. Of course mesh parabolas
>>
>>>typically only have 80% of the gain of a solid dish,
>>
>>I would seriously doubt the veracity of this statement and would be
>>gratified to see valid documented evidence of this. If the mesh openings
>>are under 0.1 lambda the mesh will appear solid. The problem may be
>>achieving good surface accuracy with a mesh dish.Those of us using mesh
>>dishes on 1296 MHz EME are seeing excellent efficiencies with mesh surfaces-
>>ultimately limited by the ability to properly illuminate the surface. For
>>EME we tend to underilluminate the surface to take advantage of lower side
>>lobes and less spill over, which means "seeing" less warm earth noise.
>>
>>Dale W4OP
>>
>
> Hi Dale,
>
> A wok has no focal 'point': it is not a true paraboloid. Its the imperfection
> in shape, not mesh:-) Ergo the loss in aperture efficiency.

For the purposes of radio signals, does the shape need to be a specific
paraboloid? Certainly at optical wavelengths a parabola is needed to
focus light from infinity, so a parabola is needed. But at radio
Frequency wavelengths a true parabola is not likely needed. In fact,
considering the difference between a sphere and a parabols, I would
suspect that anything out there is not a true parabola unless it is
arrived at by chance.

- Mike KB3EIA -

2129. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 00:14:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41269532$1_5@corp.newsgroups.com>
Source record: 90650

Richard wrote:

> Could someone tell me what the radiation angles of the following aerials
> (roughly) are:
>
> Half wave dipole
> Quarter wave verticle
> Longwire

All can be known by downloading and running the free demo version of EZNEC from:

http://www.eznec.com

You will find the radiation angle of a longwire cannot be known with
the information that you furnished.
--
73, Cecil http://www.qsl.net/w5dxp

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2130. Re: ladder line position wrt conductors?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 00:16:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412695c6_5@corp.newsgroups.com>
Source record: 90651

Larry Gagnon wrote:

> Have just installed a 135' doublet fed with 450ohm commercial ladderline.
> The position of the ladder line as it comes alongside the house and into
> the shack is currently very close to where the electrical service line
> comes in. Luckily I am not picking up any power line noise but I wonder
> how critical is it that I try to keep the ladderline away from the house
> and particularly conductive items? IF it is critial how far should I try
> to stand it off? Comments appreciated.

6 inches is what I use for other conductors. But you may not like
RF radiation in your house wiring.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2131. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 00:30:48 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <YIwVc.8193$3O3.2711@newsread2.news.pas.earthlink.net>
Source record: 90652

"Walter Maxwell" <w2du@iag.net> wrote in message
news:homci01rqa2296ockvgb495175cupnnbbc@4ax.com...
> On Fri, 20 Aug 2004 14:48:41 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet>
> wrote:
>
> >What we encountered were dynamic range problems. The instrument operates
as
> >HP says, but if a strong enough interfering signal appears at an input,
it
> >overloads the first(usually) active device, causing various unwanted
> >products to appear in band, and sometimes desensitizing the channel.
Urban
> >problem with many other radio services nearby, and it doesn't help to be
> >under the landing path of USAF aircraft with their jammers still active
> >either.
> Hi George,
>
> I understand the situation you encountered, but as I understand the 'other
> John's' situation, he was sufficiently far from strong RF fields such that
there
> would be no problem with dynamic range. My interest is what the meters
showed on
> his 8405 that would be recognized as negative resistance.
>
> Walt, W2DU

Hi, Walt -

I'm sorry to say that I did not keep the data. Shame on me. But I will keep the data the next time it comes up (if it does) and I will post it here. As I said, I have not had negative resistance show up while using the dual directional coupler, only when using the power splitter and pads. Different math relations were used to calculate the results from the two techniques, so it might very well be that it will never show up again.

Our country property where the measurements were made is about 10 miles east of Sulphur Springs, Texas, and about 80 or so miles from Dallas. There are two radio stations there, one on 1230 kHz (1 kW) and one on 95.9 MHz (6 kW). The nearest microwave tower is about 5 miles west of me and I don't think I'm in the path. There are no hams closer than 8 miles to me.

The more I think about this, the more convinced I become that I flubbed the readings or the calculations. I am learning that you cannot treat 2 meter and 70 cm signals casually. For example, when placing a short on the load

port of the coupler for calibration purposes, I can see the phase changing after the connector has made contact but is still being screwed down.

Thanks for your comments.

John

2132. Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 01:06:18 UTC
From: "William H. Everhart III" <StephenVictor@moveon.org>
Message-ID: <du7di0to921skdbmli23dgetpmf30l9728@4ax.com>
Source record: 90653

Can anyone recommend a good antenna switch? I've got 3 antenna's going into one BNC connector. Don't need anything fancy. Just a switch and three ports. Thanks

2133. Induced ground currents

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 01:24:41 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10id92orcpqd342@corp.supernews.com>
Source record: 90654

There is a figure (from ARRL Antenna Book, 20th, Chap. 3, Figure 5, page 3-4) shows the ground current, I-H, induced by the magnetic field, H-phi.

I think there is something wrong with this diagram.

Should not I-H be perpendicular to the plane of H-phi?

Not sure it really makes a difference. Just bothers me either that a) I do not understand or b) it does not agree with the physics book I am looking at. In the latter, induced EMF acts perpendicular to the plane of the magnetic field.

Sorry, tried to attach the figure, but posting rules would not accept.

Thomas

2134. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 01:55:12 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <4YxVc.2151$dB6.446@nwrddc03.gnilink.net>
Source record: 90655

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:PaGdnbc-kf8kDrvcRVn-pQ@adelphia.com...
> Fractenna wrote:
> >>
> >>. Of course mesh parabolas
> >>
> >>>typically only have 80% of the gain of a solid dish,
> >>
> >>I would seriously doubt the veracity of this statement and would be
> >>gratified to see valid documented evidence of this. If the mesh
openings
> >>are under 0.1 lambda the mesh will appear solid. The problem may be
> >>achieving good surface accuracy with a mesh dish.Those of us using mesh
> >>dishes on 1296 MHz EME are seeing excellent efficiencies with mesh
surfaces-
> >>ultimately limited by the ability to properly illuminate the surface.
For
> >>EME we tend to underilluminate the surface to take advantage of lower
side
> >>lobes and less spill over, which means "seeing" less warm earth noise.
> >>
> >>Dale W4OP
> >>
> >
> > Hi Dale,
> >
> > A wok has no focal 'point': it is not a true paraboloid. Its the
imperfection
> > in shape, not mesh:-) Ergo the loss in aperture efficiency.
>
> For the purposes of radio signals, does the shape need to be a specific
> paraboloid? Certainly at optical wavelengths a parabola is needed to
> focus light from infinity, so a parabola is needed. But at radio
> Frequency wavelengths a true parabola is not likely needed. In fact,
> considering the difference between a sphere and a parabols, I would
> suspect that anything out there is not a true parabola unless it is
> arrived at by chance.
>
> - Mike KB3EIA -
>

Hi MIke,
I am not certain I understand your answer- or Chip's.
The original poster made the statement that mesh parabolas are only 80% as

efficient as a solid parabola. That was what I was answering.

I can tell you that my 14' 1296 dish is within 5mm of being a true parabola- this is well within the 0.1 lambda RMS error.

For my purposes- EME- an imperfect parabola (this includes sperical surfaces) would lead to not only a degradation in gain, but much higher sidelobes and therefore worse G/T. It is not a difficult exercise to measure Tsys and therefore know just how well your dish is playing.
Spherical antennas certainly have their place- particularly when the surface is fixed and the beam is then steered by moving the feedhorn- i.e. Arecibo. But from memory, they take 2nd place to the parabola when one considers dB/reflector area
Dale W4OP

2135. Re: Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 02:09:04 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <w5idnZbBZN4IM7vcRVn-ig@comcast.com>
Source record: 90656

"William H. Everhart III" <StephenVictor@moveon.org> wrote in message
news:du7di0to921skdbmli23dgetpmf30l9728@4ax.com...
> Can anyone recommend a good antenna switch? I've got 3 antenna's
> going into one BNC connector. Don't need anything fancy. Just a
> switch and three ports. Thanks

Well, I haven't found one I like, but I can dis-reccomend MFJ.
I've had a couple of theirs, where the connectors FELL OFF.
They are just pressed in.

What bands is this for? The answer for 440 will be different than for 160.

--

KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

2136. Re: Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 02:20:09 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <tjyVc.1322$O%4.45@nwrddc04.gnilink.net>
Source record: 90657

"William H. Everhart III" <StephenVictor@moveon.org> wrote in message
news:du7di0to921skdbmli23dgetpmf30l9728@4ax.com...
> Can anyone recommend a good antenna switch? I've got 3 antenna's
> going into one BNC connector. Don't need anything fancy. Just a
> switch and three ports. Thanks

William

I have recently made some pretty good "coax" switches for low power VHF
using TO5 relays. I have also made some decent toggle switchs for 2 meters
with miniature microswitches.

If you have interest in building your own, E-mail me for pictures.

Jerry

2137. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 03:35:27 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <prfdi0599k1b0agmn64g5i6uur286iks7i@4ax.com>
Source record: 90658

On Sat, 21 Aug 2004 00:30:48 GMT, "The other John Smith" <jocjo-john@yooha.com>
wrote:

>
>"Walter Maxwell" <w2du@iag.net> wrote in message
>news:homci01rqa2296ockvgb495175cupnnbbc@4ax.com...
>> On Fri, 20 Aug 2004 14:48:41 -0500, "Crazy George"
><muNnscOh@attSglPobaAl.nMet>
>> wrote:
>>
>> >What we encountered were dynamic range problems. The instrument operates
>as
>> >HP says, but if a strong enough interfering signal appears at an input,
>it
>> >overloads the first(usually) active device, causing various unwanted
>> >products to appear in band, and sometimes desensitizing the channel.
>Urban
>> >problem with many other radio services nearby, and it doesn't help to be
>> >under the landing path of USAF aircraft with their jammers still active
>> >either.
>> Hi George,
>>
>> I understand the situation you encountered, but as I understand the 'other
>> John's' situation, he was sufficiently far from strong RF fields such that
>there
>> would be no problem with dynamic range. My interest is what the meters
>showed on
>> his 8405 that would be recognized as negative resistance.
>>
>> Walt, W2DU
>
>
>Hi, Walt -
>
>I'm sorry to say that I did not keep the data. Shame on me. But I will keep
>the data the next time it comes up (if it does) and I will post it here. As
>I said, I have not had negative resistance show up while using the dual
>directional coupler, only when using the power splitter and pads. Different
>math relations were used to calculate the results from the two techniques,
>so it might very well be that it will never show up again.
>
>Our country property where the measurements were made is about 10 miles east
>of Sulphur Springs, Texas, and about 80 or so miles from Dallas. There are
>two radio stations there, one on 1230 kHz (1 kW) and one on 95.9 MHz (6 kW).

>The nearest microwave tower is about 5 miles west of me and I don't think
>I'm in the path. There are no hams closer than 8 miles to me.
>
>The more I think about this, the more convinced I become that I flubbed the
>readings or the calculations. I am learning that you cannot treat 2 meter
>and 70 cm signals casually. For example, when placing a short on the load
>port of the coupler for calibration purposes, I can see the phase changing
>after the connector has made contact but is still being screwed down.
>
>Thanks for your comments.
>
>John
>
Hi John,

I believe I said earlier that the distance to any probable source of interference to your 8405 is sufficient to exclude any interference.

Is it possible to recall what you were measuring, and what the setup was when yo;u obtained the negative resistance indications, such that you could repeat it just to humor me?

And concerning the phase change when screwing down the short, it's possible there's contamination in the screw threads, either on the short or on the connector on the coupler. On the other hand, at UHF the phase can change slightly between having the short placed on the coupler before tightening down vs being completely tightened down.

I use an HP 778D coupler with N connectors, but I normally use a BNC short on an adapter when establishing a phase and magnitude reference. When using sufficient padding between the sig gen and the coupler I find no difference in magnitude of the reflection between the short or open reference.

I'm curious concerning what coupler and sig gen you use. My gens are all HP, the 606A, 608E, and 612.

Walt, W2DU

2138. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 03:58:32 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cg6h98bvp1@hercules.btinternet.com>
Source record: 90659

Crudely, the lobes in the radiation patterns of the antennas you mention, inevitably distorted by the local environment, are so broad they can be considered largely omni-directional, except that purely vertical antennas always have a vertical null and horizontal antennas don't radiate quite so well in line with the wire as they do broadside to the wire.

The type of local ground also has a disturbing effect. As people seldom know what type of soil they have it's somewhat statistically unpredictable. Which all adds to the fun.

The term "radiation angle" doesn't really apply, its a misnomer, until you have a high, multi-element, directional beam antenna which EZNEC (a computer program) can get its teeth into.

Reg, G4FGQ

==========

"Richard" <translations@qdnet.pl> wrote in message
news:cg5qm4$42o$1@nemesis.news.tpi.pl...
> Could someone tell me what the radiation angles of the following aerials
> (roughly) are:
>
> Half wave dipole
> Quarter wave verticle
> Longwire
>
> TIA,
>
> Richard
>
>

2139. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 05:44:31 UTC
From: Richard <translations@qdnet.pl>
Message-ID: <cg6nse$g0o$1@nemesis.news.tpi.pl>
Source record: 90660

By radiation angles, I have read that a 5/8 has about 15 degree)so good for DXing), and a quarter wave about 25 degress, but I am not sure if that is correct.

What roughly is the angle that a dipole radiates?

Richard

"Richard" <translations@qdnet.pl> wrote in message news:cg5qm4$42o$1@nemesis.news.tpi.pl...
> Could someone tell me what the radiation angles of the following aerials
> (roughly) are:
>
> Half wave dipole
> Quarter wave verticle
> Longwire
>
> TIA,
>
> Richard
>
>

2140. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 06:32:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rdqdi09f4akn2ktsqrb6praggte1cpttv9@4ax.com>
Source record: 90661

On Sat, 21 Aug 2004 07:44:31 +0200, "Richard" <translations@qdnet.pl>
wrote:
>By radiation angles, I have read that a 5/8 has about 15 degree)so good for
>DXing),

It also works nearly as well at 14 degrees or 16 degrees. And of
course only slightly worse at 13 degrees or 17 degrees (you couldn't
tell the difference at, say, 12 degrees or 18 degrees). And at 10
degrees or 20 degrees its not too shabby either, and probably as good
as 45 degrees (but maybe not, hard to tell).

> and a quarter wave about 25 degress, but I am not sure if that is
>correct.

About, or perhaps it is 28 degrees or 15 degrees.
>
>What roughly is the angle that a dipole radiates?

Most of them. Actually it works best straight up into the clouds, but
that doesn't mean it is worse than a vertical at 20 degrees. Funny
about these things.... Which is better: ski boots or an ottoman?

Hi Richard,

It is all a continuum where eventually in comparison to the best
angle, some angles are obviously worse. If you are going to name one
angle (and it is done quite frequently here) you have to keep in mind
that this in no way defines an antenna rigorously. It is more a
shorthand.

73's
Richard Clark, KB7QHC

2141. Re: Adding/Splicing Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 06:58:39 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <boCVc.3213$_h.847@bignews3.bellsouth.net>
Source record: 90662

```
">
> I use automotive crimp butt connectors. Some of them are tinned
> and will accept solder.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>

I vote for Cecil's solution.
you can determine the gauge of the wire in the LL with a wire-stripper or
gauge
then at Lowes or Home Depot - electrical dept pick up a pkg of un-insulated
butt splice connectors for that guage wire.
Then solder it.
OOPs - don't forget the heat shrink before the solder. (or good tape-if you
need it)

---
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
```

2142. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 08:07:12 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <kuvdi0drdp6qh54mrepenq5lu2vp3b8voj@4ax.com>
Source record: 90663

On Fri, 20 Aug 2004 23:26:14 +0200, "Richard" <translations@qdnet.pl>
wrote:

>Could someone tell me what the radiation angles of the following aerials
>(roughly) are:
>
>Half wave dipole
>Quarter wave verticle
>Longwire

These are quite irrelevant questions, unless you specify the height of
the antenna (in wavelengths) and the characteristics of the ground
(mainly conductivity) at the frequency of interest.

For instance a horizontal dipole more than 10 wavelengths above ground
would have quite omnidirectional pattern in the vertical pattern, but
nulls in the direction of the elements. Of course, this can be a bit
hard to implement on 135 kHz, but not a real problem on 1,3 GHz :-)

Paul OH3LWR

2143. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 09:03:49 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <UdEVc.5658$ml1.5489@fed1read07>
Source record: 90664

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:cg5e6f$3uv$1@newshost.mot.com...
> Actually...

SNIP

>
> The state of Wisconsin has a rather good public radio network (also on
the
> net). Saturday mornings there is a doctor's call-in show. A woman called
> in claiming that she _heard_ music coming from the mouth of her young
> son/daughter.

Turn down the volume of the little gangsta's headphones!

Wait a minute, I take that back. If the mother could identify the audio
power as "music", then it couldn't have been anything the kid would have
voluntarily listened to!

Ed
wb6wsn

2144. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 09:17:36 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <QqEVc.5659$ml1.4404@fed1read07>
Source record: 90665

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:snaci0t5c60oiucb21jtb3l89u8c2fnukm@4ax.com...
> On 20 Aug 2004 02:19:00 -0700, n1jpr@hotmail.com (SpamHog) wrote:
>
> >Today, we have more people in more countries with more tooth fillings
> >near more (and more powerful) transmitters than ever before, yet
> >nobody claims to hear radio in their teeth.
>
> All of the metal in my teeth has been replaced with composites or
> capped. This shifts the resonance out of the AM band into the marine
> band where there are fewer, less powerful transmitters nearby.
>
> YMMV
>
> 73's
> Richard Clark, KB7QHC

Richard, you gotta pay closer attention to what the doc is doing inside your mouth!

Caps have a ceramic layer atop a metal (titanium?) mandrel. And even more fun is that there's a rather large and long stainless steel post that was drilled down to nearly the end of the root of that tooth. After the post is cemented into the base of the tooth, the cap is cemented onto the post. The post might be 5/8" long, and the cap sits on the post separated by a dielectric adhesive.

Although the nerve was "killed" at the point it enters the root of the tooth, the rest of the nerve bundle really isn't that far from the end of the stainless steel post. Sounds like an interesting collection of resonant structures, lossy dielectrics, conductive fluids and potential diodes; all located quite near to your nervous system.

Any of our EZNEC gurus care to model that structure?

Ed
wb6wsn

2145. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 09:58:22 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <nJ6VPjJ+yxJBFATc@ifwtech.co.uk>
Source record: 90666

Let's try to summarise, and sort out some of the confusion:

* As Dale says, a mesh reflector is almost as efficient as a solid surface of the same shape, even for hole sizes as large as 0.1wl.

* That was a side-track anyway, since the OP doesn't have a mesh wok.

* Any vaguely bowl-shaped reflector - including a wok - will make a big improvement in cellphone performance, if you locate the cellphone at the best possible place, line the whole thing up correctly, and manage to keep your head out of the way.

* A paraboloid is the best shape for a reflector, because only a paraboloid can focus all the incoming rays to a single point; and all the incoming energy from a plane wavefront will arrive in-phase at the focal point. This applies equally to light and radio waves. Optical ray-tracing theory breaks down if the reflector is only a few wavelengths in diameter, but a paraboloid is still the best practical shape to aim for.

As Dale says, Arecibo uses a spherical reflector to allow a few degrees of beam steering by pointing the feed antenna at different areas of the dish. However, this is a very special case: the only practical way to achieve a 1000ft dish was to build it immovably on the ground, so the designers then had to find some other way to steer the beam, by moving the feed antenna at the focus. In this one special case, the optimum shape for the reflector is not a paraboloid but a sphere (because the geometry of a sphere is the same in any direction, as seem from the feedpoint at the centre).

The problem of course is that a sphere doesn't *have* a focal point - it has a smeared-out focal line with phase variations along it. For many years, long slotted-waveguide feeds were used to collect the available energy from along this focal line, and to compensate for the phase variations. By doing this, the Arecibo designers were able to achieve similar efficiencies to a paraboloid of the same size, and with some degree of steerability too. The limitation was that a different feed was required for every frequency of operation, and this obviously restricted the range of research.

With computer-aided design replacing 1950s slide-rules, Arecibo now has a sub-reflector system of a very cunning shape that compensates for the phase variations. Being a reflector it is not frequency-sensitive, and it brings everything into focus at a conventional single-point feedhorn which can be changed in relative comfort - that is, if anyone can feel comfortable suspended out on cables, 500ft in mid-air...

Because Puerto Rico is quite close to the Equator, the Moon passes overhead from time to time, and this allowed the Arecibo observatory to do pioneering work on radar mapping of the Moon's surface. It also turned out that the old 400MHz line feed would work reasonably well on 432MHz, and back in the old days there were occasional empty time-slots when the dish would appear on EME. Sometime in the mid-1980s I had the good fortune to work KP4I on what seems to have been the last opportunity. He was LOUD.

(That's an outsider's view of Arecibo. Chip, please correct any inaccuracies :-)

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2146. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 10:04:35 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <GZpd7PLz4xJBFAWg@ifwtech.co.uk>
Source record: 90667

Cecil Moore wrote:
>Angela & Gary wrote:
>> Yes, I have heard of the existence of such a program -
>>unfortunately, the folks at Texas Towers have not. I emailed them
>>approx 1 month ago without joy. Was this program free for the using?
>>If so, can anyone forward it to me (or perhaps run a few numbers for
>>me)?? Thanks again all for the excellent suggestions/links etc.
>
>It's a program that they will run for you on their computer.
>If you want a self-supporting 16.5 ft element, just ask what
>materials you need for e.g. 90 mph.
>--
It's probably K7NV's program, that Torsten mentioned.

You can buy it from K7NV's website (see Torsten's posting) but Texas Towers obviously can't copy it to you.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2147. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 11:47:01 UTC
From: fractenna@aol.com
Message-ID: <20040821074701.05881.00004261@mb-m05.aol.com>
Source record: 90668

>FATc@ifwtech.co.uk>
>
>
>Let's try to summarise, and sort out some of the confusion:
>
>* As Dale says, a mesh reflector is almost as efficient as a solid
>surface of the same shape, even for hole sizes as large as 0.1wl.
>
>* That was a side-track anyway, since the OP doesn't have a mesh wok.
>
>* Any vaguely bowl-shaped reflector - including a wok - will make a big
>improvement in cellphone performance, if you locate the cellphone at
>the best possible place, line the whole thing up correctly, and manage
>to keep your head out of the way.
>
>* A paraboloid is the best shape for a reflector, because only a
>paraboloid can focus all the incoming rays to a single point; and all
>the incoming energy from a plane wavefront will arrive in-phase at the
>focal point. This applies equally to light and radio waves. Optical
>ray-tracing theory breaks down if the reflector is only a few
>wavelengths in diameter, but a paraboloid is still the best practical
>shape to aim for.
>
>
>As Dale says, Arecibo uses a spherical reflector to allow a few degrees
>of beam steering by pointing the feed antenna at different areas of the
>dish. However, this is a very special case: the only practical way to
>achieve a 1000ft dish was to build it immovably on the ground, so the
>designers then had to find some other way to steer the beam, by moving
>the feed antenna at the focus. In this one special case, the optimum
>shape for the reflector is not a paraboloid but a sphere (because the
>geometry of a sphere is the same in any direction, as seem from the
>feedpoint at the centre).
>

Basically correct. Although the tracking is better than just a few degrees:-)

Arecibo was initially designed to be a surveillance instrument, passively listening to Soviet communications through inadvertant moonbounce. It also was designed, initially, as an ionospheric heating facility.

Through the huge luck of its overengineering, it was found to be able to track quite accurately, and the feeds and carriage houses were designed to accommodate a greater tracking range.

Today the site no longer has chicken wire (and hasn't for 30 years); and the feeds are Gregorians that accommodate very large bandwidths and spectral ranges. Most of the recent upgrades were funded by the NSF, and also the Seti Institute.

73,
Chip N1IR

2148. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 11:51:10 UTC
From: fractenna@aol.com
Message-ID: <20040821075110.05881.00004263@mb-m05.aol.com>
Source record: 90669

>For the purposes of radio signals, does the shape need to be a specific
>paraboloid? Certainly at optical wavelengths a parabola is needed to
>focus light from infinity, so a parabola is needed. But at radio
>Frequency wavelengths a true parabola is not likely needed. In fact,
>considering the difference between a sphere and a parabols, I would
>suspect that anything out there is not a true parabola unless it is
>arrived at by chance.
>
> - Mike KB3EIA -
>

No; but optimum aperture efficiency is attained with a point feed, as you get with a true paraboloid. Spheres work too--if you can make a good line feed.

If you are willing to throw a few dB away, and don't care about the sidelobes and shape of the main beam to any great degree, then all kinds of imperfections from paraboloids work well.

Of course, a pringle can also works at 2.4...so there are many options.

73,
Chip N1IR

2149. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 11:53:01 UTC
From: fractenna@aol.com
Message-ID: <20040821075301.05881.00004265@mb-m05.aol.com>
Source record: 90670

>I am not certain I understand your answer- or Chip's.
>The original poster made the statement that mesh parabolas are only 80% as
>efficient as a solid parabola. That was what I was answering.

The wok's inefficiencies stem from the fact that it is not a true paraboloid.

73,
Chip N1IR

2150. Re: Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 12:17:14 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <e3HVc.31244$cT6.4688@fe2.columbus.rr.com>
Source record: 90571

If you can find one on EBAY or some trading page look for a Daiwa CS-401.
This would handle 4 antennas from 0-1300 MHz.

73 Richard WB8KRN

"William H. Everhart III" <StephenVictor@moveon.org> wrote in message
news:du7di0to921skdbmli23dgetpmf30l9728@4ax.com...
> Can anyone recommend a good antenna switch? I've got 3 antenna's
> going into one BNC connector. Don't need anything fancy. Just a
> switch and three ports. Thanks

2151. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 12:38:24 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <4nHVc.29379$9Y6.3595@newsread1.news.pas.earthlink.net>
Source record: 90572

"Walter Maxwell" <w2du@iag.net> wrote in message
news:prfdi0599k1b0agmn64g5i6uur286iks7i@4ax.com...
> On Sat, 21 Aug 2004 00:30:48 GMT, "The other John Smith"
<jocjo-john@yooha.com>
> wrote:
>
> >
> >"Walter Maxwell" <w2du@iag.net> wrote in message
> >news:homci01rqa2296ockvgb495175cupnnbbc@4ax.com...
> >> On Fri, 20 Aug 2004 14:48:41 -0500, "Crazy George"
> ><muNnscOh@attSglPobaAl.nMet>
> >> wrote:
> >>
> >> >What we encountered were dynamic range problems. The instrument
operates
> >as
> >> >HP says, but if a strong enough interfering signal appears at an
input,
> >it
> >> >overloads the first(usually) active device, causing various unwanted
> >> >products to appear in band, and sometimes desensitizing the channel.
> >Urban
> >> >problem with many other radio services nearby, and it doesn't help to
be
> >> >under the landing path of USAF aircraft with their jammers still
active
> >> >either.
> >> Hi George,
> >>
> >> I understand the situation you encountered, but as I understand the
'other
> >> John's' situation, he was sufficiently far from strong RF fields such
that
> >there
> >> would be no problem with dynamic range. My interest is what the meters
> >showed on
> >> his 8405 that would be recognized as negative resistance.
> >>
> >> Walt, W2DU
> >>
> >
> >Hi, Walt -
> >
> >I'm sorry to say that I did not keep the data. Shame on me. But I will

keep
> >the data the next time it comes up (if it does) and I will post it here.
As
> >I said, I have not had negative resistance show up while using the dual
> >directional coupler, only when using the power splitter and pads.
Different
> >math relations were used to calculate the results from the two
techniques,
> >so it might very well be that it will never show up again.
> >
> >Our country property where the measurements were made is about 10 miles
east
> >of Sulphur Springs, Texas, and about 80 or so miles from Dallas. There
are
> >two radio stations there, one on 1230 kHz (1 kW) and one on 95.9 MHz (6
kW).
> >The nearest microwave tower is about 5 miles west of me and I don't think
> >I'm in the path. There are no hams closer than 8 miles to me.
> >
> >The more I think about this, the more convinced I become that I flubbed
the
> >readings or the calculations. I am learning that you cannot treat 2 meter
> >and 70 cm signals casually. For example, when placing a short on the load
> >port of the coupler for calibration purposes, I can see the phase
changing
> >after the connector has made contact but is still being screwed down.
> >
> >Thanks for your comments.
> >
> >John
> >
> Hi John,
>
> I believe I said earlier that the distance to any probable source of
> interference to your 8405 is sufficient to exclude any interference.
>
> Is it possible to recall what you were measuring, and what the setup was
when
> yo;u obtained the negative resistance indications, such that you could
repeat
> it just to humor me?

No, I'm afraid not. I made so many measurements that weekend that it sort of
turned my brain to mush. I will set up the apparatus as I did before and
repeat some experiments. I like to be humored, too.

> And concerning the phase change when screwing down the short, it's
possible
> there's contamination in the screw threads, either on the short or on the
> connector on the coupler. On the other hand, at UHF the phase can change
> slightly between having the short placed on the coupler before tightening

down
> vs being completely tightened down.

The phase change is not a problem, just an observation. After thinking about it, it makes perfect sense. It was due to the shortening of the path as the shorted connector was screwed on. The change was not large, maybe a degree or two. It just surprised me that the setup was that sensitive.

> I use an HP 778D coupler with N connectors, but I normally use a BNC short on an
> adapter when establishing a phase and magnitude reference. When using sufficient
> padding between the sig gen and the coupler I find no difference in magnit ude of
> the reflection between the short or open reference.

I use a 11570A kit which includes a power splitter, two probe Ts, two terminators and a short. I also add two attenuators per the HP application note. All are type N connectors.

> I'm curious concerning what coupler and sig gen you use. My gens are all HP, the
> 606A, 608E, and 612.

Recently I have replaced the splitter and attenuators with a Narda dual directional coupler. It is with this setup that I seem to be moderately successful. My generator is an HP 3200B VHF Oscillator.

John

2152. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 13:31:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41275028_6@corp.newsgroups.com>
Source record: 90573

Richard wrote:
> What roughly is the angle that a dipole radiates?

By "angle that a dipole radiates" do you mean the
angle of maximum radiation? If so, it depends upon
the height and length of the dipole among other things.
Download the free version of EZNEC and see for yourself.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2153. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 13:37:50 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <CLu8P+QuA1JBFAXC@ifwtech.co.uk>
Source record: 90574

Fractenna wrote:
>>As Dale says, Arecibo uses a spherical reflector to allow a few degrees
>>of beam steering by pointing the feed antenna at different areas of the
>>dish. However, this is a very special case: the only practical way to
>>achieve a 1000ft dish was to build it immovably on the ground, so the
>>designers then had to find some other way to steer the beam, by moving
>>the feed antenna at the focus. In this one special case, the optimum
>>shape for the reflector is not a paraboloid but a sphere (because the
>>geometry of a sphere is the same in any direction, as seem from the
>>feedpoint at the centre).
>>
>
>Basically correct. Although the tracking is better than just a few
>degrees:-)
>
Thanks for the correction - I hadn't realised it can steer up to 40 deg.
A Google search for "arecibo feed" produced that information, and much
more.

Nice pictures of the 43MHz feed at:
http://tinyurl.com/64cp9
and
http://tinyurl.com/69sa3
Against the dish itself, it's easy to lose your sense of scale - that
little thing is 90ft tall.

>Arecibo was initially designed to be a survellance instrument,
>passively listening to Soviet communications through inadvertant
>moonbounce. It also was designed, initially, as an ionospheric heating
>facility.
>
>Through the huge luck of its overengineering, it was found to be able
>to track quite accurately, and the feeds and carriage houses were
>designed to accommodate a greater tracking range.

The official history (http://tinyurl.com/46zfd) is less forthcoming
about the original intentions, but there's an interesting "40 years ago"
article at
http://www.elecdesign.com/Articles/ArticleID/3700/3700.html

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2154. Re: Wok antenna - UHF /microwaves !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 14:57:51 UTC
From: fractenna@aol.com
Message-ID: <20040821105751.14991.00002042@mb-m02.aol.com>
Source record: 90575

>The official history (http://tinyurl.com/46zfd) is less forthcoming
>about the original intentions

Correct.

73,
Chip N1IR

2155. Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 14:59:55 UTC
From: uce@ftc.gov
Message-ID: <McidnQJsKb3y_rrcRVn-pw@comcast.com>
Source record: 90576

I have been running a Butternut HF9V. I recently retuned it after adding the 160 meter mod, and obtained the same results I did when I first installed it. Basically it appears to be a couple of feet short on 10 meters with minimum SWR at 28.9 MHz and long on 17 meters with SWR not falling below 2.8. I am considering buying a 72" 3/8" tube to extend it for 10 meters, but I'm stumped on 17 meters. Has anyone encountered this and found a fix? I have a good ground system with plenty of 30' radials, and the antenna works very well, but I would like to get the SWR down.

73,

Phil - N1KI

Anti-spam measure to direct unwanted e-mail
to the FTC's unsolicited commercial e-mail address.

For direct reply, use my callsign in arrl.net
format or look me up on qrz.com

2156. More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 15:16:49 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040821111649.21353.00001746@mb-m18.aol.com>
Source record: 90577

On TopBand reflector the "guru" proclaimed:

"The only thing that prevents people from shooting themselves
in the foot with the wire below the Beverage is the wire
couples to the lossy media below it so well it becomes very
lossy, and of course that means it doesn't help with
stability or termination."

So if you want wire to be lossy, jus' lay it on the ground! :-)
... and the "worshipers" nodded in amazement

Believing W8JI claims can be hazardous to your radios. :-)

Yuri da BUm

2157. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 15:49:56 UTC
From: drwxr-xr-x <bit-bucket@config.com>
Message-ID: <slrncierp4.10a5.bit-bucket@shell.config.com>
Source record: 90578

On 21 Aug 2004 15:16:49 GMT, self-important Yuri Blanarovich
failed a maturity test:

> On TopBand reflector the "guru" proclaimed:

plonk

2158. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 15:59:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mfrei096esa7l916h2ri4j2u3do4058d2m@4ax.com>
Source record: 90579

On Sat, 21 Aug 2004 02:17:36 -0700, "Ed Price" <edprice@cox.net>
wrote:

>Richard, you gotta pay closer attention to what the doc is doing inside your
>mouth!
>
>Caps have a ceramic layer atop a metal (titanium?) mandrel. And even more
>fun is that there's a rather large and long stainless steel post that was
>drilled down to nearly the end of the root of that tooth.

Hi Ed,

I know the dentistry business quite intimately. I help a buddy out
with new dentistry technologies. What you describe are rather old
techniques. My dentist built up a cap in the office on an NC machine
in 15 minutes to replace one that had been built without any coloring
(it was as white as chalk). I've only had one root canal after the
dentist got tired of waiting for years to fix the abscess (never
bothered me as much as it did him). Even then, the cap required no
post, he filled the excavation in much the same way as any prepped
cavity and capped it off.

No metal involved, much to the loss of another buddy who has a
patented technique in gold based construction. All the work I am
aware of is now done by casts. By the way, the profit margin is HUGE
for the dentist. He easily pays only $100 for the cap from the
laboratory. I can only hazard a guess to what you pay the dentist
(me, about $600).

73's
Richard Clark, KB7QHC

2159. Re: Dead Serious T2FD: HV Insulation, EMP Arrestors, extra Coax Choke?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 16:05:13 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408210805.332541d2@posting.google.com>
Source record: 90580

> Climb to the top of the building (you HAVE done this, haven't you?)

The top of my condo became very popular after I taught local kids how to pick the locks many years ago, a long time befor I got my own keys. Problem was, they would not limit themselves to our own condo roof. Now the place looks like a WW1 front line, as other condos erected barbed wire everywhere to keep them out. Luckily they can't be seen from the street level...

> and LOOK at those antennas and feed lines already there. Do they have
> this protection you fantasize about? Do they treat anything as
> ground? Do their lines tie to it?

The other ham has a mess of some 20 or so lines, including meteosat x 2, sat-tv x 3, HF wire, HF beam, HF vertical, 2m GP, 2m collinear, 2m yagi, 70cm 2 elements x 16 array, 23 cm dish, VHF discone, weather station, 70 cm moonbounce, plus controls for rotor and azimut mount for the dish. All bonded in several places, and to the lattice tower as well. Plus the guy has a ground from shack on down.

My obvious wish is that any rogue moving charge will prefer his invitation to mine.

> molten [...] unobtainium

AFAIK, properly grounded gear rarely melts, although you tend to get some burn marks where the plasma kissed the metal.

I have climbed as far as about 5 feet above the rotor, i.e. some 30+ feet from the roof and about 140 ft above street level. Any higher would be unwise without a harness (I do not intend to emulate Col. Armstrong, esp. with no chick looking on, although I did drag a few up to the roof). No burn marks up to that height. The unobtainum ingots that lie neatly stacked on the roof look pristine.

> is there any evidence of a fine
> metal particulate mist deposited along side the building (it will look
> glittery like Disco Makeup for a drag queen)?

We do get a lot of that, but it must come from other local sources. Probably drag queens.

> Ask yourself, what makes your antenna so much more
> attractive when the Eiffel Tower looms over it.

Intrinsic beauty?

> hearses in the parking lot

Right, thinking of my numerous pacemaker-equipped neighbors you must be right. They do not fall like flies in an electrical storm.

People killed by lighting in this area tend to be caught by exploding trees in parks. In the last serious case (2 dead, I think + several hurt, about a years ago) one lady's arm was was temporarily paralyzed by the EMP she caught from an umbrella she was holding about 50 ft from the tree that got hit. Those closer to the hit were hurt mechanically, not electrically.

It was really bad luck. It had just started raining, and it was the very first bolt, while they were all leaving the park for a nearby cafe' - they were not braving the storm right under the trees.

> building those pentangle chokes may if fact incur a
> vengeful bolt delivered directly to you.

Plus, any "pentagon" could also get the local jihadis all worked up.

Hmmm, should I get some local priest / imam to come over and bless the hell out of it? A friend of mine did that to all his motorbikes, and they did work more reliably than mine. Now that I think of it, some local catholic priest indeed comes over for a round of apartment-by-apartment blessing once a year, and I always opted out. There must some neighborhood aura of blessedness that got layered on year after year.

> Who knows, in this modern
> age that religious metaphor may be embellished to a nuclear cruise
> missile to fulfill the prophecy of EMP. (Ah! Images of Monty
> Python's Holy Hand Grenade come to mind.)

Pass the Lord and praise the Ammunition!

> Let us know how it turns out. ;-)

It may take a while, esp. as I have to reuse (steal) someone else's abandoned & forgotten flue line to bring the coax to my place.

A former underground garage & repair shop was turned into an unheated undergroud parking facility. They just ripped out the furnace (which for many years had provided me with an excellent local ground, btw!, although they never noticed).

Now I have to drill a hole in a little known structure to access the chimney up on top. A straight 110ft drop! I hope I won't hit asbestos, which is a definite possibility.

When the wire is up, I'll post some pix, I promise!

73 & thanks

N1JPR/I2

2160. Re: keeping the spreaders in place

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 16:27:32 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408210827.49369f8@posting.google.com>
Source record: 90581

Thank you!

My antenna is already build and strung up to stretch before I lock everything in place. The holes on the pipes are slightly too large to provide reliable friction.

I also got email advice (thank you Kees!) to use tie wraps around the wire but _inside_ the pipes. I'll use a couple of rounds of copper telephone twisted pair for that. Twisted pair is an interesting material.

I am testing polyurethane foam with the electrical pipes I used, which are made of some unknown polymer.

If the foam bonds OK, I will inject it, then stick a ball of crumpled alufoil into each end of a pipe, and perhaps dab on another bit of UV resistant glue to block the foil balls in place.

2161. Re: radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 16:39:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2opc57Fcnml9U1@uni-berlin.de>
Source record: 90582

Earlier:
> By "angle that a dipole radiates" do you mean the
> angle of maximum radiation? If so, it depends upon
> the height and length of the dipole among other things.

To be more exact, a linear (1/2-wave) dipole produces maximum radiation at all angles perpendicular to its center.

But as suggested by the quote above, radiation from the driven element along with the distance, geometry, and electrical characteristics of nearby conductors (including the earth) will determine the final pattern of the radiated signal.

R. Fry

2162. Re: ladder line position wrt conductors?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 16:51:26 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <h4LVc.49631$mD.24271@attbi_s02>
Source record: 90583

I run 4 to 6 inches from nearby metal.

Cecil Moore wrote:
> Larry Gagnon wrote:
>
>> Have just installed a 135' doublet fed with 450ohm commercial ladderline.
>> The position of the ladder line as it comes alongside the house and into
>> the shack is currently very close to where the electrical service line
>> comes in. Luckily I am not picking up any power line noise but I wonder
>> how critical is it that I try to keep the ladderline away from the house
>> and particularly conductive items? IF it is critial how far should I try
>> to stand it off? Comments appreciated.
>
>
> 6 inches is what I use for other conductors. But you may not like
> RF radiation in your house wiring.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2163. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 17:17:41 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <VsLVc.5948$ml1.3749@fed1read07>
Source record: 90584

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:mfrei096esa7l916h2ri4j2u3do4058d2m@4ax.com...
> On Sat, 21 Aug 2004 02:17:36 -0700, "Ed Price" <edprice@cox.net>
> wrote:
>
> >Richard, you gotta pay closer attention to what the doc is doing inside
your
> >mouth!
> >
> >Caps have a ceramic layer atop a metal (titanium?) mandrel. And even more
> >fun is that there's a rather large and long stainless steel post that was
> >drilled down to nearly the end of the root of that tooth.
>
> Hi Ed,
>
> I know the dentistry business quite intimately. I help a buddy out
> with new dentistry technologies. What you describe are rather old
> techniques. My dentist built up a cap in the office on an NC machine
> in 15 minutes to replace one that had been built without any coloring
> (it was as white as chalk). I've only had one root canal after the
> dentist got tired of waiting for years to fix the abscess (never
> bothered me as much as it did him). Even then, the cap required no
> post, he filled the excavation in much the same way as any prepped
> cavity and capped it off.
>
> No metal involved, much to the loss of another buddy who has a
> patented technique in gold based construction. All the work I am
> aware of is now done by casts. By the way, the profit margin is HUGE
> for the dentist. He easily pays only $100 for the cap from the
> laboratory. I can only hazard a guess to what you pay the dentist
> (me, about $600).

> 73's
> Richard Clark, KB7QHC

Well, I'm an old guy! I grew up being conditioned to having carries drilled
and filled. (Never did the orthodontia route though.) I then graduated to
the next life-phase, wher the carries became multi-surfaced. That morphed
into putting on caps. And then the cap jobs moved onto crown jobs. Now I've
got myself my first bridge; hey, I finally own a bridge!

Yeah, crowns are about $600 in Southern California too. Been a while since I
bought one, but I did know about the mark-up. Unfortunately, do-it-yourself
dentistry is quite difficult. I find it interesting that many local dentists
are still one-man shops, while individual practitioner physicians are almost

extinct. I had talked with my dentist about advanced lab techniques like you described; but she got a misty look in her eyes as she described the financial aspects.

Anyway, as it is now, I've got enough metal bits in my mouth that I could probably qualify as a diplexer on some band.

Ed
wb6wsn
"You will feel a slight pressure."
"Is it safe yet?"

2164. Preferred antenna location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 17:38:42 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <CMLVc.201098$tH1.10623682@twister.southeast.rr.com>
Source record: 90585

Other than locating an antenna as high as posible and in open space, are there "sweet spots" that behave like funnels for radio waves? By moving a portable receiver around to find the strongest signal, I have noticed that certain locations (I'm talking feet and yards, not miles) produce much more signal strength than others. Of course, I also end up moving the antenna angle too which may be responsible for this behavior. Just wondering if this effect is worth considering when installing an antenna. Or am I just finding the strongest lobe of the antenna pattern?

Ron, W4TQT

2165. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 17:50:38 UTC
From: dtdonaly <dtdonaly@sbcglobal.net>
Message-ID: <OXLVc.8779$yU5.519@newssvr29.news.prodigy.com>
Source record: 90586

If you take issue with something Tom wrote, why not
just deal with him direct?
73,
Tom Donaly KA6RUH

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040821111649.21353.00001746@mb-m18.aol.com...
> On TopBand reflector the "guru" proclaimed:
>
> "The only thing that prevents people from shooting themselves
> in the foot with the wire below the Beverage is the wire
> couples to the lossy media below it so well it becomes very
> lossy, and of course that means it doesn't help with
> stability or termination."
>
> So if you want wire to be lossy, jus' lay it on the ground! :-)
> ... and the "worshipers" nodded in amazement
>
> Believing W8JI claims can be hazardous to your radios. :-)
>
> Yuri da BUm
>

2166. Re: Preferred antenna location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 17:56:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fjeci0543a7t9i1n98ekpo30m6vd39tv9l@4ax.com>
Source record: 90587

On Sat, 21 Aug 2004 17:38:42 GMT, Ron <rmrippy@hotmail.com> wrote:

>Just wondering if this effect is
>worth considering when installing an antenna.

Hi Ron,

There is merit in doing a site survey, as this would be called.
However, if you are doing this in the VHF/UHF regions, you may wish to
consider that you are part of the optimization by being in the region
of this best signal determination. If you plant a permanent fixture
on this basis, you might want to set up your easy chair nearby to
maintain the optimization.

73's
Richard Clark, KB7QHC

2167. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 18:07:16 UTC
From: The other John Smith <jocjo-john@yooha.com>
Message-ID: <obMVc.29646$9Y6.23767@newsread1.news.pas.earthlink.net>
Source record: 90588

"Walter Maxwell" <w2du@iag.net> wrote in message
news:prfdi0599k1b0agmn64g5i6uur286iks7i@4ax.com...
> On Sat, 21 Aug 2004 00:30:48 GMT, "The other John Smith"
<jocjo-john@yooha.com>
> wrote:

> Is it possible to recall what you were measuring, and what the setup was
when
> yo;u obtained the negative resistance indications, such that you could
repeat
> it just to humor me?

Okay, I just found a tiny note on a piece of paper which says:

"B1/A1 = .90 at 180 degrees reference (shorted)"

and

"16 and 1/2 inches of RG58A (shorted) gives B2=0.74, A2=0.81, at -110
degrees"

This works out to -0.56 - 35i. Unfortunately, my note does not indicate the
nature of the load.

It looks like the real part goes negative if A1B2/A2B1 > 1. Yes, I think I
see it now. If the reflection coefficient is greater than one, that
indicates more is being reflected than is being supplied -- meaning I have a
source at the supposedly shorted end of the coax. Ah ha! I am now very
confident that I either misread the instruments or misadjusted something.

Anyway, I think I have the answer I was seeking. Except under extraordinary
circumstances, I should never get a negative real part answer.

My thanks to the contributors of this thread. It sure helps to have others
to talk things over with.

John

2168. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 18:20:43 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <fmMVc.12477$yh.1034@fed1read05>
Source record: 90589

"dtdonaly" <dtdonaly@sbcglobal.net> wrote in message
news:OXLVc.8779$yU5.519@newssvr29.news.prodigy.com...
> If you take issue with something Tom wrote, why not
> just deal with him direct?
> 73,
> Tom Donaly KA6RUH
>

Or, open it for discussion in that forum?

Pete

2169. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 18:52:26 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <KRMVc.201109$tH1.10629814@twister.southeast.rr.com>
Source record: 90591

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:KgtUc.2113$Fg5.1658@attbi_s53...
> Jimmy I know what the cuurent curve shows on a radiating element and I
> suspect that you do also.
> Now show me an equivalent current curve for a circle so I can see the
> differences in area under the current curve.
> Are they different or are they the same?. If you know where such a
> comparison is shown and they are different
> you are then positioned to inform me why.
> By the same token if they are the same which is how most people see it
then
> I will be better able to
> resolve my conundrum for myself.
> Art
> "Jimmie" <Gfender@carolina.rr.com> wrote in message
> news:yvqUc.198625$tH1.10173612@twister.southeast.rr.com...
> >
> > "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
> message
> > news:VH6Uc.324209$XM6.205186@attbi_s53...
> > > Gentlemen
> > > I have in the past alluded not only radiation from a straight element
> but
> snipNot knowing how you came to your conclusion no one can tell you why
you
> are
> > wrong.. My uncle used to have a paint and body shop with a 57 Chevy up
on
> a
> > pole in front of his shop. While the car would make an awful antenna it
> > would be futile to try to explain why. In another way of saying it would
> be
> > like explaining to a student how he missed a math problem when all he
> shows
> > is an answer. The best the instructor can do is tell him he is right or
> > wrong. In your case the instructor would not even be sure which problem
he
> > had done.
> >
> >
>
>

When used in an antenna coils have approximately the current distibution characteristics as the part of the antenna they are substituting for. Yuri has an excellent article on this and there has been much discussion about his on the NG. However taken this in the context of the rest of what you have said during this string I dont think this is what yiu are looking for. What you are looking for does not exist.

2170. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 18:57:06 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <6WMVc.201111$tH1.10630082@twister.southeast.rr.com>
Source record: 90590

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-3BE22E.12595919082004@comcast.dca.giganews.com...
> I am planning to construct a vertical dipole array for 20m. The
> electrical calculations are complete (with help from LB Cebik) and now
> I'm looking for some advice on the physical construction. I'd like to
> use Al tubing and find unfortunately that this is difficult to come by
> locally. I will likely obtain this then from Texas Towers and therefore
> the tubing lengths will be limited to 6 ft each. They do offer nesting
> sizes so the real question is what diameter to utilize for the lower
> most 6 ft segment (dipole being some 34 ft or so). Recalling the approx
> dimensions of commercial vert antennas I've had in the past leads me to
> believe that 1.25" or so would be sufficient. Comments/advice ?? I
> would like to do this without guys if possible and plan on attaching the
> lower-most segments to 4x4's. Thanks in advance all.
>
> Gary
Al and emt will bend in the first good wind. I have used top rail for chain
link fences with good success. Sections are made to fit together and can be
drilled and pinned together with a bolt.

2171. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 21:31:10 UTC
From: The Other John Smith <jocjo_john@yooha.com>
Message-ID: <cg8f2h02a93@enews1.newsguy.com>
Source record: 90592

```
"The other John Smith" <jocjo-john@yooha.com> wrote in message
news:obMVc.29646$9Y6.23767@newsread1.news.pas.earthlink.net...
>
> "Walter Maxwell" <w2du@iag.net> wrote in message
> news:prfdi0599k1b0agmn64g5i6uur286iks7i@4ax.com...
> > On Sat, 21 Aug 2004 00:30:48 GMT, "The other John Smith"
> <jocjo-john@yooha.com>
> > wrote:
>
> > Is it possible to recall what you were measuring, and what the setup was
> when
> > yo;u obtained the negative resistance indications, such that you could
> repeat
> > it just to humor me?
>
>
> Okay, I just found a tiny note on a piece of paper which says:
>
> "B1/A1 = .90 at 180 degrees reference (shorted)"
>
> and
>
> "16 and 1/2 inches of RG58A (shorted) gives B2=0.74, A2=0.81, at -110
> degrees"
>
>
> This works out to -0.56 - 35i. Unfortunately, my note does not indicate
the
> nature of the load.
>
> It looks like the real part goes negative if A1B2/A2B1 > 1. Yes, I think I
> see it now. If the reflection coefficient is greater than one, that
> indicates more is being reflected than is being supplied -- meaning I have
a
> source at the supposedly shorted end of the coax. Ah ha! I am now very
> confident that I either misread the instruments or misadjusted something.
>
> Anyway, I think I have the answer I was seeking. Except under
extraordinary
> circumstances, I should never get a negative real part answer.
>
> My thanks to the contributors of this thread. It sure helps to have others
> to talk things over with.
>
```

> John

Stupid me! The load is a shorted piece of RG58A! I said that and then I said
I didn't know the nature of the load!

Where the hell is my head these days?

2172. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 21:33:03 UTC
From: The Other John Smith <jocjo_john@yooha.com>
Message-ID: <cg8f2j12a93@enews1.newsguy.com>
Source record: 90593

"The other John Smith" <jocjo-john@yooha.com> wrote in message
news:obMVc.29646$9Y6.23767@newsread1.news.pas.earthlink.net...
>
> "Walter Maxwell" <w2du@iag.net> wrote in message
> news:prfdi0599k1b0agmn64g5i6uur286iks7i@4ax.com...
> > On Sat, 21 Aug 2004 00:30:48 GMT, "The other John Smith"
> <jocjo-john@yooha.com>
> > wrote:
>
> > Is it possible to recall what you were measuring, and what the setup was
> when
> > yo;u obtained the negative resistance indications, such that you could
> repeat
> > it just to humor me?
>
>
> Okay, I just found a tiny note on a piece of paper which says:
>
> "B1/A1 = .90 at 180 degrees reference (shorted)"
>
> and
>
> "16 and 1/2 inches of RG58A (shorted) gives B2=0.74, A2=0.81, at -110
> degrees"
>
>
> This works out to -0.56 - 35i. Unfortunately, my note does not indicate
the
> nature of the load.
>
> It looks like the real part goes negative if A1B2/A2B1 > 1. Yes, I think I
> see it now. If the reflection coefficient is greater than one, that
> indicates more is being reflected than is being supplied -- meaning I have
a
> source at the supposedly shorted end of the coax. Ah ha! I am now very
> confident that I either misread the instruments or misadjusted something.
>
> Anyway, I think I have the answer I was seeking. Except under
extraordinary
> circumstances, I should never get a negative real part answer.
>
> My thanks to the contributors of this thread. It sure helps to have others
> to talk things over with.
>

> John

Stupid me! The load is a shorted piece of RG58A! I said that and then I said
I didn't know the nature of the load!

Where the hell is my head these days?

2173. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 22:03:49 UTC
From: Peter Parker <parkerp@NOSPAMalphalink.com.au>
Message-ID: <4127c54f@news.alphalink.com.au>
Source record: 90594

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:fmMVc.12477$yh.1034@fed1read05...
>
> "dtdonaly" <dtdonaly@sbcglobal.net> wrote in message
> news:OXLVc.8779$yU5.519@newssvr29.news.prodigy.com...
> > If you take issue with something Tom wrote, why not
> > just deal with him direct?
> > 73,
> > Tom Donaly KA6RUH

Tom must be doing something right - he's the only US station I've ever
worked on 160m (with 5 watts QRP & a very modest end-fed wire by the way).

73, Peter VK3YE http://www.qsl.net/vk3ye

2174. MOSELY TA-33

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-21 22:49:00 UTC
From: aokd5fxt@aol.com
Message-ID: <20040821184900.23168.00004092@mb-m07.aol.com>
Source record: 90595

I BELIEVE I HAVE PICKED UP A TA-33. NOT REALLY SURE, BUT IF SOMEONE HAS THE
SPECS ON IT... MAYBE I COULD FIGURE IT OUT. IF A MANUAL OR COPY IS AVAILABLE,
I COULD CERTAINLY USE ANY INFO ON THIS BEAM...
THANKS
BILL

2175. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 00:07:58 UTC
From: TOM <noname@noprovider.nodomain>
Message-ID: <ytRVc.5381$dB6.3298@nwrddc03.gnilink.net>
Source record: 90597

John, negative resistance is indicated when the magnitude of the reflection
coefficient is greater than one.
The solution of the impedance equation for rho > 1 yields negative values of
resistance. This lends a lot
of insight into possible causes:

The calibration for open or short is slightly lossy. If a measured load
has a little more reflection than the
calibration loads, it would indicate as negative resistance.

Numerical errors creep into the results. The Smith chart is extremely
sensitive around the periphery.
A few tenths of a dB. result in large movements at the edge of the chart.
Thus, small calibration or
computational errors can result in crossing over the rho=1 circle.

And, as mentioned, detection of external RF fields increasing the output
of the reflection detector
past the calibration value can result in a measured value for rho > 1.

-- Tom, N5EG

"The other John Smith" <jocjo-john@yooha.com> wrote in message
news:iV6Vc.7027$3O3.6810@newsread2.news.pas.earthlink.net...

> The HP paper discusses negative resistance but does not mention where one
> would encounter it. I assume it would normally be associated with active
> device measurements. Is this true? If I measure a (passive) load and find
> that the resistance is negative, shouldn't I doubt my setup and/or
> procedure? Is there any condition where a passive, real-world, network
could
> show a negative resistance?
>

>
> John KD5YI
>
>

2176. Re: MOSELY TA-33

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 00:12:37 UTC
From: Walts Cat <"Walt's Cat"@newsgroup.com>
Message-ID: <VxRVc.1033$UM3.812@newsfe2-gui.ntli.net>
Source record: 90596

Try here
http://www.mosley-electronics.com/amateur.htm

2177. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 00:56:55 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <d5rfi05fisbju2pf8udq7h664e6oudkfft@4ax.com>
Source record: 90598

On Sat, 21 Aug 2004 16:31:10 -0500, "The Other John Smith"
<jocjo_john@yooha.com> wrote:

>
>"The other John Smith" <jocjo-john@yooha.com> wrote in message
>news:obMVc.29646$9Y6.23767@newsread1.news.pas.earthlink.net...

>snip

>> My thanks to the contributors of this thread. It sure helps to have others
>> to talk things over with.
>>
>> John
>
>
>Stupid me! The load is a shorted piece of RG58A! I said that and then I said
>I didn't know the nature of the load!
>
>Where the hell is my head these days?
>
Well, John, there's nothing wrong with your head, except perhaps you're not
really acquainted with the characteristics of shorted RG58's. RG58's are notable
for their storage of heat. After they are energized, and the souce disconnected,
then as the coax cools down and the heat is radiated, a new emf is generated
causing current to flow in the reverse direction. The coax is now a new source
and the power you measured with the 8405 is indicated as negative resistance.

Walt

PS--I once thought I'd become a standup comedian, but the competition was too
great.

2178. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 01:22:46 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4127f567$0$74192$39cecf19@news.twtelecom.net>
Source record: 90599

Walter Maxwell wrote:

> On Sat, 21 Aug 2004 16:31:10 -0500, "The Other John Smith"
> <jocjo_john@yooha.com> wrote:
>
>
> Well, John, there's nothing wrong with your head, except perhaps you're not
> really acquainted with the characteristics of shorted RG58's. RG58's are notable
> for their storage of heat. After they are energized, and the souce disconnected,
> then as the coax cools down and the heat is radiated, a new emf is generated
> causing current to flow in the reverse direction. The coax is now a new source
> and the power you measured with the 8405 is indicated as negative resistance.
>
> Walt
>
> PS--I once thought I'd become a standup comedian, but the competition was too
> great.
>

Was the RG58 vertical at the time? If you have the shorted up when
vertical, the charge gets pulled back down, causing partial, or during
times of gravitational anamolies, more than complete, cancelation of the
forward looking, i.e "liberal", current, which we all know causes Pointy
Vector to swerve to the right. If you hang the shorted end down, the
reverse occurs, causing more current, or "conservative" current, and
swings the Pointy Vector to the left.

One controversial way to deal with this, is to spin the shorted section
in the horizontal plane, and then we seem to get charge flowing with no
real direction calling itself - "Nader".

tom
K0TAR

2179. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 01:46:15 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4127fae8$0$74195$39cecf19@news.twtelecom.net>
Source record: 90600

Tom Ring wrote:

<snip>
> Vector to swerve to the right. If you hang the shorted end down, the
> reverse occurs, causing more current, or "conservative" current, and
> swings the Pointy Vector to the left.
>

Sorry, should have read "causing more current, or "conservative" current
to be canceled".

tom
K0TAR

2180. El Toro antenna -Anyone remember it?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 01:51:46 UTC
From: sbc yahoo news <nn7kexk7zfg@nospamsbcglobal.net>
Message-ID: <S_SVc.1414$Rp6.716@newssvr14.news.prodigy.com>
Source record: 90601

Some 35-40 years ago there was an "El Toro" (if memory serves correct, by one of the
major 3 antenna companies, cant remember if was a dipole, or tuned wire sloper
configureation, but was constructed from (think) 450 ohm ladder line, and couple of traps
and good for the low bands. the traps were places on one side of the ladder line, at
strategic locations, to resonate this for (think 80-40-20, and maybe 15-10) Kinda flimsy,
but where not much inclimate wx, seemed to work. Question 1) -- Who made it ?
Question 2), anyone still got manual for it?? (think maybe mosely, or hygain, but then
as stated, long time ago! Mught use coax for cap for it, and coil-- just curious-
Jim NN7K (mail to nn7kexk7zfg@sbc(nospam)global.net (remove the (nospam).
Tks

2181. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 03:07:19 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <fe3gi0pip1vvr2artbcr2n7i06le8uua6p@4ax.com>
Source record: 90602

On Sat, 21 Aug 2004 20:46:15 -0500, Tom Ring <news0000@taring.org> wrote:

>Tom Ring wrote:
>
><snip>
>> Vector to swerve to the right. If you hang the shorted end down, the
>> reverse occurs, causing more current, or "conservative" current, and
>> swings the Pointy Vector to the left.
>>
>
>Sorry, should have read "causing more current, or "conservative" current
>to be canceled".
>
>tom
>K0TAR
>
Verily,

Walt, W2DU

2182. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 03:38:21 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <4128140d.225335796@news.galilei.com>
Source record: 90603

Hi Phil

My antenna tuned perfectly until I added the 160 coil, then I had to retune the whole thing and had lots of woes until I finally found that sweet spot on each band where the SWR was down where it belonged.

It has been a long while and I don't remember, but I did have to make a NEW feed coil in place of that enameled wire one that was more than twice as many turns, same diameter, before anything came close to tuning up right. I used the same gauge wire as the original, just made it with twice as many turns, spacing was closer also. I did find it's best to leave this new coil on a tube because it gets bumped easily. What I did was cut the bottom out of a plastic cylinder about 14 inches in diameter and placed that around the antenna base. A little round-up inside the container from time to time and a box of salt kept the weeds out.

TTUL
Gary

2183. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 04:17:27 UTC
From: uce@ftc.gov
Message-ID: <_eWdnZU26JLFg7XcRVn-hg@comcast.com>
Source record: 90604

Thanks Gary, I initially tried tuning with the original coil in place and received a 5-1-9 report from 122 miles away. The lower three bands tuned well, but I figured I must be passing 160 right into the ground system. I totally removed the enameled coil and only 80 would not come below 1.7. 40 and 160 matched very well, so I think I can get by with that. Leaving the coil off has resulted in 5-9-9's from everyone I called so far on 160, so perhaps I was right about radiating into the ground.So far, it seems to be doing a great job.

The problem with 10 and 17 meters has been with me since the antenna was new and before I put the 160 kit on it. I have had more pressing issues and had forgotten about it until I retuned the antenna after adding the 160 coil. I have heard other comments made about not getting a good match on 17 meters.

I was hoping someone out here had found a simple fix because the antenna works so well as is that I can't see putting a lot of effort into fixing something so minor.

73,

Phil - N1KI

In article <4128140d.225335796@news.galilei.com>, raiar@slacc.com.nospam wrote:
>Hi Phil
>
>My antenna tuned perfectly until I added the 160 coil, then I had to
>retune the whole thing and had lots of woes until I finally found that
>sweet spot on each band where the SWR was down where it belonged.
>
>It has been a long while and I don't remember, but I did have to make
>a NEW feed coil in place of that enameled wire one that was more than
>twice as many turns, same diameter, before anything came close to
>tuning up right. I used the same gauge wire as the original, just
>made it with twice as many turns, spacing was closer also. I did find
>it's best to leave this new coil on a tube because it gets bumped
>easily. What I did was cut the bottom out of a plastic cylinder about
>14 inches in diameter and placed that around the antenna base. A
>little round-up inside the container from time to time and a box of
>salt kept the weeds out.
>
>TTUL
>Gary
>

Anti-spam measure to direct unwanted e-mail
to the FTC's unsolicited commercial e-mail address.

For direct reply, use my callsign in arrl.net
format or look me up on qrz.com

2184. Re: El Toro antenna -Anyone remember it?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 04:19:14 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <69VVc.298789$%_6.285984@attbi_s01>
Source record: 90605

"sbc yahoo news" <nn7kexk7zfg@nospamsbcglobal.net> wrote in message
news:S_SVc.1414$Rp6.716@newssvr14.news.prodigy.com...
> Some 35-40 years ago there was an "El Toro" (if memory serves correct, by
> one of the
> major 3 antenna companies, cant remember if was a dipole, or tuned wire
> sloper
> configureation, but was constructed from (think) 450 ohm ladder line, and
> couple of traps
> and good for the low bands. the traps were places on one side of the
> ladder
> line, at
> strategic locations, to resonate this for (think 80-40-20, and maybe
> 15-10)
> Kinda flimsy,
> but where not much inclimate wx, seemed to work. Question 1) -- Who made
> it
> ?
> Question 2), anyone still got manual for it?? (think maybe mosely, or
> hygain, but then
> as stated, long time ago! Mught use coax for cap for it, and coil-- just
> curious-
> Jim NN7K (mail to nn7kexk7zfg@sbc(nospam)global.net (remove the
> (nospam).
> Tks
>
A quick Google.com search brought these references:

From: Fred Hopengarten" K1VR Mon Jun 13 01:35:32 1994
Subject: El Toro antenna

I used an El Toro antenna for Phone and CW SS as an undergraduate at Colby
College, Waterville, ME, in, I think,
1966. I erected it at two different locations: at the Outing Club Lodge by
BIG lake, and at the blockhouse for
spotters and broadcasters 50 feet above Colby's football field. Colby,
which plays the likes of Williams, Bowdoin,
Middlebury, and so forth, has a football program smaller than most Texas
high schools.

The rig for the contest was an NCX-3 (for you newcomers, a transceiver for
80-40-20 only, ssb and CW --
but CW had no offset and no RIT; but, unlike some other SSB transceivers at
the time, it was stable). I think I won one
of the weekends for Maine, but my conclusion, based on performance that
weekend and the context of other

experiments, was that the El Toro sucked wind. I think I only made about 250 QSO's in 25 hours. Everyone who worked
me that weekend (I was then W1NJL) is to be congratulated. I would say that the signal was equivalent to a bad
experience with an eight foot whip.

If I could relive those two weekends, I'd erect an 80 meter dipole sloping SW, fed with 300 ohm line, into an
antenna tuner (a dipole on 80 and two half waves in phase on 40); and a dipole on 20 (down just 7 dB from a 3 el. Yagi).

Never underestimate the efficiency of a dipole -- just put it up as high as possible.

Fred Hopengarten K1VR
Six Willarch Road * Lincoln, MA 01773-5105
****

In early 1964, Dave Hollander (now N7RK) operated WN6IWX in Tustin, CA. His Hallicrafters "pair" includes an HT-40 transmitter (left) and an SX-115 receiver. His antenna was a Mosley NC-3 "El Toro," and the station was good for 44 states and 10 countries before Dave upgraded to WB6NRK. His Dad, now N6UC, worked for Hallicrafters in Santa Ana, CA.

****
From: Randy A Thompson, K5ZD Sat Jun 11 03:38:59 1994
Subject: Antenna Question

In June 94 CQ Magazine, World of Ideas column by K4TWJ, there is an interesting antenna given the name "El Toro."

It is basically a 1/4-wave of 450 ohm open wire fed against ground.

K4TWJ writes about this antenna:

"Rather than using a single wire "worked against ground" (like a 1/4 wave vertical), it is made of ladder line with ground connected to one conductor. This simple step raises the antenna's signal radiation efficiency from 20 to 60 percent."
****
w9gb

2185. Re: Adding/Splicing Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 04:47:12 UTC
From: "George, W5YR" <w5yr@att.net>
Message-ID: <kzVVc.493750$Gx4.438438@bgtnsc04-news.ops.worldnet.att.net>
Source record: 90606

I use wire nuts for all mechanical/electrical connections on my wire antennas and ladderlines. Works great and easily removed or changed as needed.

73, George W5YR
Fairview, TX
w5yr@att.net
http://www.w5yr.com

"Gary Boyer" <gboyer@columbus.rr.com> wrote in message news:nVoVc.28640$cT6.10177@fe2.columbus.rr.com...
> I need to add some additional ladder line to an existing antenna....the
> ladder line I am using is the heavy duty stuff...it is a very difficult to
> splice this stuff..does anyone have any suggestions to make this job a bit
> easier...I am having allot of trouble just making a mechanical
> connection...thanks....Gary...K8BY
>
> --
>
>
> ---
> "Are you still wasting your time with spam?...
> There is a solution!"
>
> Protected by GIANT Company's Spam Inspector
> The most powerful anti-spam software available.
> http://mail.spaminspector.com
>
>
>

2186. Re: El Toro antenna -Anyone remember it?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 05:05:56 UTC
From: sbc yahoo news <nn7kexk7zfg@nospamsbcglobal.net>
Message-ID: <UQVVc.1484$Rp6.1044@newssvr14.news.prodigy.com>
Source record: 90607

Thanks, sounds like not the best--

Jim

"G.Beat" <now9spamgb@no.comcast.spam.net> wrote in message
news:69VVc.298789$%_6.285984@attbi_s01...
> "sbc yahoo news" <nn7kexk7zfg@nospamsbcglobal.net> wrote in message
> news:S_SVc.1414$Rp6.716@newssvr14.news.prodigy.com...
> > Some 35-40 years ago there was an "El Toro" (if memory serves correct,
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> > one of the
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> > sloper
> > configureation, but was constructed from (think) 450 ohm ladder line,
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> > (nospam).
> > Tks
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> A quick Google.com search brought these references:
>
> From: Fred Hopengarten" K1VR Mon Jun 13 01:35:32 1994
> Subject: El Toro antenna
>
> I used an El Toro antenna for Phone and CW SS as an undergraduate at Colby
> College, Waterville, ME, in, I think,
> 1966. I erected it at two different locations: at the Outing Club Lodge
by
> BIG lake, and at the blockhouse for

> spotters and broadcasters 50 feet above Colby's football field. Colby,
> which plays the likes of Williams, Bowdoin,
> Middlebury, and so forth, has a football program smaller than most Texas
> high schools.
>
> The rig for the contest was an NCX-3 (for you newcomers, a transceiver for
> 80-40-20 only, ssb and CW --
> but CW had no offset and no RIT; but, unlike some other SSB transceivers
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> of the weekends for Maine, but my conclusion, based on performance that
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> the signal was equivalent to a bad
> experience with an eight foot whip.
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> SW, fed with 300 ohm line, into an
> antenna tuner (a dipole on 80 and two half waves in phase on 40); and a
> dipole on 20 (down just 7 dB from a 3 el. Yagi).
>
> Never underestimate the efficiency of a dipole -- just put it up as high
as
> possible.
>
> Fred Hopengarten K1VR
> Six Willarch Road * Lincoln, MA 01773-5105
> **********
>
> In early 1964, Dave Hollander (now N7RK) operated WN6IWX in Tustin, CA.
His
> Hallicrafters "pair" includes an HT-40 transmitter (left) and an SX-115
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> good for 44 states and 10 countries before Dave upgraded to WB6NRK. His
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> From: Randy A Thompson, K5ZD Sat Jun 11 03:38:59 1994
> Subject: Antenna Question
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> interesting antenna given the name "El Toro."
>
> It is basically a 1/4-wave of 450 ohm open wire fed against ground.
>
> K4TWJ writes about this antenna:

>
> "Rather than using a single wire "worked against ground" (like a 1/4 wave
> vertical), it is made of ladder line with ground connected to one
> conductor. This simple step raises the antenna's signal radiation
efficiency
> from 20 to 60 percent."
> **********
> w9gb
>
>
>
>

2187. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 05:57:28 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <gcdgi090i065fs5apk18s3fmtviqhk53f2@4ax.com>
Source record: 90608

On Sat, 21 Aug 2004 18:07:16 GMT, "The other John Smith"
<jocjo-john@yooha.com> wrote:

I tried sending you an email on this but you've spoofed your address
so bad I guess you didn't get it.

Pity.

2188. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 06:48:29 UTC
From: Murray <me@powerup.com.au>
Message-ID: <412841ae$0$22820$5a62ac22@per-qv1-newsreader-01.iinet.net.au>
Source record: 90609

Agree - I've seen his station, as well
Murray vk4aok

Peter Parker wrote:

> " Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
> news:fmMVc.12477$yh.1034@fed1read05...
>
>>"dtdonaly" <dtdonaly@sbcglobal.net> wrote in message
>>news:OXLVc.8779$yU5.519@newssvr29.news.prodigy.com...
>>
>>>If you take issue with something Tom wrote, why not
>>>just deal with him direct?
>>>73,
>>>Tom Donaly KA6RUH
>
>
> Tom must be doing something right - he's the only US station I've ever
> worked on 160m (with 5 watts QRP & a very modest end-fed wire by the way).
>
> 73, Peter VK3YE http://www.qsl.net/vk3ye
>
>
>

2189. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 10:01:17 UTC
From: dgoncz@aol.com
Message-ID: <20040822060117.05605.00003298@mb-m14.aol.com>
Source record: 90610

OK, I've got it.

ftp://users.aol.com/DGoncz/Antenna/

08/22/2004 05:43AM 161,463 BoomClip.JPG
08/19/2004 07:45AM 112,318 CeilingSpacer.JPG
08/22/2004 05:43AM 180,516 ConnectionDetail.JPG
08/22/2004 05:43AM 190,270 ConnectorDetail.JPG
08/19/2004 07:45AM 111,110 HangerAndLead.JPG
08/22/2004 05:43AM 192,334 HangerDetail.JPG
08/22/2004 05:44AM 126,769 HangerOverall.JPG
08/19/2004 07:45AM 137,884 LeadCloseup.JPG
08/22/2004 05:43AM 157,620 OverallConnection.JPG
08/22/2004 05:43AM 129,931 OverallView.JPG
08/22/2004 05:43AM 128,858 OverallView2.JPG
08/22/2004 05:43AM 133,346 PlugCovered.JPG
08/22/2004 05:43AM 100,341 PlugFilled.JPG
08/22/2004 05:43AM 96,303 PlugSoldered.JPG
08/22/2004 05:43AM 102,568 PlugTaped.JPG
08/22/2004 05:43AM 146,279 PlugWhipped.JPG
08/22/2004 05:43AM 172,030 ShieldClip.JPG
08/22/2004 05:43AM 199,604 StrainRelief.JPG

WHFS in stereo at 3 AM.

I note the plug has to be in just more than half way, not all the way for best results. Maybe I should be using a balun, coax, and a phone jack adapter as suggested.

But the original antenna was a dipole. So what did they do, ground one leg? I have checked and the sleeve/barrel at the computer is grounded. I'll pull the board and have another look at the traces. I'm sure tip and ring are balanced but we'll just have a look under the hood....

The flat chisel tip did a much better job of transferring heat to the connector lug and hardly any plastic melted this time. The lug heated quickly and the tip drew a film of solder over it. My apprenticeship ended in 1986.

I filled the space with hot melt, and applied a little over the connection, then taped it, drew over the braid, and whipped the braid down over the end, with the ends of the braid falling neatly into the groove between the threads and the flange. Then I lacquered the whipping with nail polish. I'll heat shrink over it some day.

The boom and therefore the reflector elements are grounded, as they normally would be. I don't know if this does anything. They are grounded from the sheild through a clip lead to a bracket supporting a reflector element.

No active amplification is used.

It works just great. No rabbit ears, no aluminum foil, and it picks up pointed due east as it should. All 10 FM stations on my dial read the same on the VU meter, all are in stereo, and there is very little noise or interference.

Just one thing. There's a cable dangling from the middle of the ceiling.

For now, primary Teri can live with this. We will be sharing this whole space soon. Right now I am renting 26 square feet of office space and paying towards the cable modem and fax line.

Yours,
Doug Goncz (ftp://users.aol.com/DGoncz/incoming)
Student member SAE for one year.
I love: Dona, Jeff, Kim, Mom, Neelix, Tasha, and Teri, alphabetically.
I drive: A double-step Thunderbolt with 657% range.

2190. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 11:39:08 UTC
From: John Smith <kd5yiatmindspringdotcom>
Message-ID: <cga0kv01udh@enews4.newsguy.com>
Source record: 90612

"Walter Maxwell" <w2du@iag.net> wrote in message
news:fe3gi0pip1vvr2artbcr2n7i06le8uua6p@4ax.com...
> On Sat, 21 Aug 2004 20:46:15 -0500, Tom Ring <news0000@taring.org> wrote:
>
> >Tom Ring wrote:
> >
> ><snip>
> >> Vector to swerve to the right. If you hang the shorted end down, the
> >> reverse occurs, causing more current, or "conservative" current, and
> >> swings the Pointy Vector to the left.
> >>
> >
> >Sorry, should have read "causing more current, or "conservative" current
> >to be canceled".
> >
> >tom
> >K0TAR
> >
> Verily,
>
> Walt, W2DU

Snicker! You guys are a hoot!

John, KD5YI

2191. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 11:41:33 UTC
From: John Smith <kd5yiatmindspringdotcom>
Message-ID: <cga0pi01ugr@enews4.newsguy.com>
Source record: 90613

"TOM" <noname@noprovider.nodomain> wrote in message
news:ytRVc.5381$dB6.3298@nwrddc03.gnilink.net...
> John, negative resistance is indicated when the magnitude of the
reflection
> coefficient is greater than one.
> The solution of the impedance equation for rho > 1 yields negative values
of
> resistance. This lends a lot
> of insight into possible causes:
>
> The calibration for open or short is slightly lossy. If a measured
load
> has a little more reflection than the
> calibration loads, it would indicate as negative resistance.
>
> Numerical errors creep into the results. The Smith chart is extremely
> sensitive around the periphery.
> A few tenths of a dB. result in large movements at the edge of the chart.
> Thus, small calibration or
> computational errors can result in crossing over the rho=1 circle.
>
> And, as mentioned, detection of external RF fields increasing the
output
> of the reflection detector
> past the calibration value can result in a measured value for rho > 1.
>
> -- Tom, N5EG

Yes, I see that now, Tom. Thanks.

John, KD5YI

2192. Peoria Superfest 2004, September 17,18,19, 2004

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 11:55:28 UTC
From: WA9VRH Larry <wa9vrh@mtco.com>
Message-ID: <41288910_2@corp.newsgroups.com>
Source record: 90611
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

Hi All,
Peoria Superfest 2004, September 17,18,19, 2004
Exposition Gardens, Peoria IL
Amateur Radio Hamfest and Computer Show
GPS Coordnates: 40 deg 45.9 min N, 89 deg 37.09 Min W
Great flea market and commercial buildings.
Lots of boatanchor equipment and parts
FCC Exams Sunday
For more information: http://www.peoriasuperfest.com/
73 see you there!

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2193. Re: El Toro antenna -Anyone remember it?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 12:37:03 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <Pr0Wc.299699$%_6.92774@attbi_s01>
Source record: 90614

"sbc yahoo news" <nn7kexk7zfg@nospamsbcglobal.net> wrote in message
news:UQVVc.1484$Rp6.1044@newssvr14.news.prodigy.com...
> Thanks, sounds like not the best--
>
> Jim
>

Jim -

It depends upon which "El Toro" is being referenced. One was a Mosley beam,
the other 2 different wire antennas.

Sounds like the "El Toro" name has been reused over the years for different
antenna designs.

w9gb

2194. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 14:37:08 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408220637.1263c026@posting.google.com>
Source record: 90615

tclay@qmc.ph.msstate.edu wrote in message news:<877jrudkgd.fsf@qmc.ph.msstate.edu>...
> >I am planning to construct a vertical dipole array for 20m. The
> >electrical calculations are complete (with help from LB Cebik) and now
> >I'm looking for some advice on the physical construction. I'd like to
>
> Here's one link:
>
> http://k7nv.com/notebook/id3.htm
>
> For 20m (unguyed), the base can be thinner than 1.25". To get an idea,
> look at the taper schedule for 20m yagi elements...there the center
> section is often 1" or even 7/8".

I don't agree. A 20M yagi half-element is around 17 feet long, a
self-supporting 20M vertical is around 34 feet tall. In your context
he needs to look at the taper schedule for a 40M yagi to get the
drift. The stress in a fixed end cantilever beam like a vertical
antenna goes up as the square of length (stress is proportional to
WL^^2 where W is the wind load). Without actually running the stress
analysis I suspect he'll need a base tube which is around 2.000"
diameter, maybe even 2.500" diameter x 0.058 wall 6061T6 aluminum.

> Torsten
> N4OGW

Brian w3rv

2195. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 15:03:35 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822110335.02800.00002213@mb-m04.aol.com>
Source record: 90616

>>>>If you take issue with something Tom wrote, why not
>>>>just deal with him direct?
>>>>73,
>>>>Tom Donaly KA6RUH
>>
>>

I had my share of dealing with Tom direct and pointing out wrong information that he was spreading on the waves of Internet. For that I was attacked by him and called "pathological scientist" rather than engaging in reasoning and discussions. When I tried to defend the truth and reality on the reflectors, I would be unsubscribed by Herr Administrator and Tom was given last word, "proving" he is "right". To those reflectors I never came back and one of them is TopBand. This is #7 gross misstatement from Tom that I am pointing out. I mentioned it here for the benefit of those who care. If anyone wants to worship W8JI and his "pontifical" statements that are sometimes wrong, be my guest.

>> Tom must be doing something right - he's the only US station I've ever
>> worked on 160m (with 5 watts QRP & a very modest end-fed wire by the way).
>>
>> 73, Peter VK3YE http://www.qsl.net/vk3ye

..and that proves that everything Tom says is right?

People can be wrong, and usually appreciate if they are corrected or shown better way. W8JI seems to be "absolutely right" even when he is wrong. He would first ridicule the one who tries to correct his misconceptions. Then if argument ensues and he realizes and is convinced that he was wrong, he would not admit it, but goes quiet for a while and later emerges as a "guru" on the subject pretending it was all his invention. He is doing some things right, but he has this attitude that does not reflect well on hams and it is not manly to attack someone for bringing up correction, and then making it his own "invention", not giving credit where is due. That is called plagiarism.
So, I brought this up for those who care about reality, and I am taking advantage for ability to post here, where reflector Gestapo will not silence me. Tom is hanging around reflectors where he is protected by administrators, when he encounters knowledgeable opposition to some of his fallacies, he can't take the heat, will not admit being wrong and goes and thrives behind reflector Gestapo. I am not looking for fights, I am trying to point out when I see something posted publicly wrong.

If anyone cares to discuss the subject, or explain how the conductor laid on the ground can lose its conductivity, bring it on. I can't figure out how this could happen and I would enjoy being enlightened.

73 Yuri, K3BU.us

2196. G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 15:25:36 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <LV2Wc.48074$n7.108@fe37.usenetserver.com>
Source record: 90617

I can read all kinds of info about the 'full sized' G5RV, but I have yet to find any detailed performance info on the G5RV Jr.

Like:
- The original G5RV was designed mainly for 20 meters, with acceptable performance on 80/40 and if you are lucky maybe 17. What might be the optimum band for the Jr., if it has one?
- I've seen EZNEC outputs demonstrating the gain and the lobes the regular G5RV generates, but never with the Jr. I suppose I could attempt to model it, but my skill with EZNEC is limited. Has anyone successfully modeled a Jr? What's it look like?
- Do any GOOD EZNEC input files exist for the regular G5RV AND the G5RV Jr.? Or at least the full sized version, I guess it could always be modified to fit the Jr. I've attempted the full sized G5RV model with strange results (again my skills are not too good, but I keep trying anyway).
- The full sized G5RV definitely has different characteristics over it's smaller brother, or so it seems. The full sized one I have works well on 17, but the Jr. a friend has does not. Mine is so-so on 12, his Jr. works very well on 12. Does anyone really know why? Or is it just luck of the antenna?

Thanks!

--

****
Jim & Pat Leder
http://home.fuse.net/k8cxm
****

2197. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 15:26:44 UTC
From: wa0goz@arrl.net
Message-ID: <4128BB34.1961@arrl.net>
Source record: 90618

Yuri Blanarovich wrote:

>People can be wrong, and usually appreciate if they are corrected or >shown better way.

Are you the same Yuri Blanarovich that cheated a lot of people,
including me, out of issues of "RadioSporting" Magazine a number of
years ago? Seem's you need to be shown the better way.

Henry WA0GOZ

2198. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 15:52:54 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgafgm$75b$1@titan.btinternet.com>
Source record: 90619

```
"John Smith" <kd5yiatmindspringdotcom> wrote in message
news:cga0pi01ugr@enews4.newsguy.com...
>
> "TOM" <noname@noprovider.nodomain> wrote in message
> news:ytRVc.5381$dB6.3298@nwrddc03.gnilink.net...
> > John, negative resistance is indicated when the magnitude of the
> reflection
> > coefficient is greater than one.
> > The solution of the impedance equation for rho > 1 yields negative
values
> of
> > resistance. This lends a lot
> > of insight into possible causes:
> >
> > The calibration for open or short is slightly lossy. If a measured
> load
> > has a little more reflection than the
> > calibration loads, it would indicate as negative resistance.
> >
> > Numerical errors creep into the results. The Smith chart is
extremely
> > sensitive around the periphery.
> > A few tenths of a dB. result in large movements at the edge of the
chart.
> > Thus, small calibration or
> > computational errors can result in crossing over the rho=1 circle.
> >
> > And, as mentioned, detection of external RF fields increasing the
> output
> > of the reflection detector
> > past the calibration value can result in a measured value for rho > 1.
> >
> > -- Tom, N5EG
>
>
> Yes, I see that now, Tom. Thanks.
>
> John, KD5YI
>
========================================

Measured values of Rho greater than 1.0 are not necessarily due to
measurement errors. They can be true. The true theoretical maximum value of
Rho is 1 + Sqrt(2) which occurs on transmission lines only at extremely low
```

frequencies and with a purely inductive terminating impedance. It arises due to resonance between line impedance and the termination and cannot be of any consequence at RF.

Values of Rho greater than 1.0 are mathematically legitimate as may be demonstrated by exact computer programs when presented with exact data. In any case, the Smith Chart is inherently inexact at the lower frequencies in addition to the user's difficulties of reading from it.

The reflection coefficient can quite easily lie in any of the four 90-degree quadrants. If the real component of the vector is negative it may be thought to correspond somewhere to an imaginary negative resistance. But when Rho is correctly used in line input and output impedance calculations it always gives the correct answers. ie., negative resistances cannot exist. Resistances are always lossy.

Reg, G4FGQ

2199. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 16:10:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <thghi0t8j1m2po45f14caf9prmhobhk07p@4ax.com>
Source record: 90620

On 22 Aug 2004 10:01:17 GMT, dgoncz@aol.com (Doug Goncz) wrote:

>OK, I've got it.
>
>ftp://users.aol.com/DGoncz/Antenna/
>
>WHFS in stereo at 3 AM.
>
>I note the plug has to be in just more than half way, not all the way for best
>results. Maybe I should be using a balun, coax, and a phone jack adapter as
>suggested.

Yes, very much if things are this touchy. You are trying to feed a
high Z antenna into a low Z cable. Radio Shack has a very common
BalUn product designed to take care of this very simply (and using
common coaxial products they sell too).
>
>
>No active amplification is used.

That's fine, but by all of your accounts, you are on the thin edge.

>For now, primary Teri can live with this.

Hi Doug,

Teri may be able to get along with it much more, if you realized you
have two antennas in one and simply remove one of them. Simple, is
easier said than simple.

By all appearances you have a combination FM-TV antenna as I see at
least 5 elements (you don't show the entire antenna by the way) and
you are only using 3 of them. Your connection should be at the end
that is pointing (east) at the station you want to hear. If it is
not, you have it pointed backwards and this may explain why things are
so hinky. Another clue that you can verify. There should be another
set of antenna connections (like wing nuts that presently you connect
to) at the OPPOSITE end of the boom - n'est pas? They should be on
the next to last elements before the end of the boom.

73's
Richard Clark, KB7QHC

2200. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 16:38:21 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822123821.02800.00002215@mb-m04.aol.com>
Source record: 90521

>
>Are you the same Yuri Blanarovich that cheated a lot of people,
>including me, out of issues of "RadioSporting" Magazine a number of
>years ago? Seem's you need to be shown the better way.
>
>Henry WA0GOZ
>
>

Henry,
I would be very careful who are you calling cheater!
According to my records, WA0GOZ, you were sent few free issues in the beginning, never subscribed, never paid the dime.
Can you send me label from your last issue and how much do I owe you? Now I can refund anyone requesting so.
Interesting that most noise about Radiosporting is made by people who didn't subscribe but are somehow "cheated".

For your information, I "invested" over $70,000 of my money and sleepless nights into publishing magazine that would serve DXers and contesters. When due to financial, family and health reasons I could not do so anymore, no one came forward offering help, NCJ went in competition to "bury" me rather than cooperate, I am glad to be still around and not joining likes of late W4AN.
Just read the crap on eHam.net when W4AN was in bind, requested some help and bunch of whiny cheap hamsters drove him off, rather then contributing and helping someone who was so dedicated to our beloved hobby. There are quite a few sickos around and they project themselves with their postings.

73 Yuri

2201. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 17:53:13 UTC
From: wa0goz@arrl.net
Message-ID: <4128DD89.7A29@arrl.net>
Source record: 90522

Yuri Blanarovich wrote:
>
> >
> >Are you the same Yuri Blanarovich that cheated a lot of people,
> >including me, out of issues of "RadioSporting" Magazine a number of
> >years ago? Seem's you need to be shown the better way.
> >
> >Henry WA0GOZ
> >
> >
>
> Henry,
> I would be very careful who are you calling cheater!
> According to my records, WA0GOZ, you were sent few free issues in the
> beginning, never subscribed, never paid the dime.

That's not true. I paid for everything, but didn't get all I paid for.

> Can you send me label from your last issue and how much do I owe you?

No I can't. I junked the copies I had.

>Interesting that most noise about Radiosporting is made by people who >didn't subscribe but are somehow "cheated".

I wasn't one of them if you want people on this NG to believe that. I did subscribe.

Henry WA0GOZ

2202. Re: HP 8405 and negative resistance of antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 17:55:05 UTC
From: John Smith <kd5yiatmindspringdotcom>
Message-ID: <cgamlu025ok@enews1.newsguy.com>
Source record: 90523

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:gcdgi090i065fs5apk18s3fmtviqhk53f2@4ax.com...
> On Sat, 21 Aug 2004 18:07:16 GMT, "The other John Smith"
> <jocjo-john@yooha.com> wrote:
>
> I tried sending you an email on this but you've spoofed your address
> so bad I guess you didn't get it.
>
> Pity.

Hi, Wes. Yes it is a pity that we have to go to so much inconvenience to keep spam to a tolerable level. Sorry about that.

I tried to email you, too, but you may have not checked it by the time I post this. You can reach me through the ARRL reflector as kd5yi at arrl dot net.

Thanks.

John, KD5YI

2203. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 18:24:46 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgaodeikt1@titan.btinternet.com>
Source record: 90524

You can accurately mathematically model a G5RV (and any other dipole with any feedline, coax or not, tuner and balun) using program DIPOLE3.

But a G5RV, with its coax, has a somewhat worse performance, on the average, than any other multiband, random length dipole. Without the coax it is exactly the same as any other multiband, random length dipole except that, merely to preserve its name, you are stuck with a feedline that must be exactly 1/2-wave long at 14.15 MHz. Which is never the right length for your backyard and shack.

As for the 'Half-size" G5RV, its the biggest joke ever played by manufacturers and salesmen on ex-CB'ers and novice purchasers.

G5RV himself, a true, venerable, grand old gentleman of amateur radio, must squirm in his grave whenever the description is mentioned.

Download program DIPOLE3 from the website below in a few seconds and run immediately. No unzipping inconvenience. In view of the advertised popularity of the G5RV the basic data can be entered in the program with a single key-stroke.

You must enter data for the 1/2-size G5RV, or any other dipole, yourself.

Incidentally, the best performance multi-band dipole is of a random length which fits into your back yard, fed with any random length of 450-ohm line, or a 500 or 600-ohm open wire line, which also fits in your back yard, in conjunction with a tuner. Spend your money on the tuner. Simplicity Invariably Rules!

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2204. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 18:58:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgaqd4qlf1@hercules.btinternet.com>
Source record: 90525

Yuri, I agree in general with your, not out of place, semi-technical sentiments.

But regarding lossy wires, laid on the ground, as for a Beverage which is often supposed to depend on ground loss, we must be very careful of making a virtue out of a vice.

I venture to say the higher an LF Beverage was above the ground the more efficient, both on receive and transmit, it would have become. The reason a wire as long the Beverage was so near to the ground was because of the high cost of a lot of very tall poles.

The rest is old-wives' tales.

Or have I inadvertently changed the subject?

Reg.

2205. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 19:22:43 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <87isbbhta4.fsf@qmc.ph.msstate.edu>
Source record: 90526

>I don't agree. A 20M yagi half-element is around 17 feet long, a
>self-supporting 20M vertical is around 34 feet tall. In your context
>he needs to look at the taper schedule for a 40M yagi to get the

You are right- I missed the "vertical dipole" part :)

Torsten
N4OGW

2206. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 19:36:32 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <5athi0dauu2o5ms31gidf03i60dt18rsh4@4ax.com>
Source record: 90527

On Sun, 22 Aug 2004 18:24:46 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>You can accurately mathematically model a G5RV (and any other dipole with
>any feedline, coax or not, tuner and balun) using program DIPOLE3.
>
>But a G5RV, with its coax, has a somewhat worse performance, on the average,
>than any other multiband, random length dipole. Without the coax it is
>exactly the same as any other multiband, random length dipole except that,
>merely to preserve its name, you are stuck with a feedline that must be
>exactly 1/2-wave long at 14.15 MHz. Which is never the right length for
>your backyard and shack.
>
>As for the 'Half-size" G5RV, its the biggest joke ever played by
>manufacturers and salesmen on ex-CB'ers and novice purchasers.
>
>G5RV himself, a true, venerable, grand old gentleman of amateur radio, must
>squirm in his grave whenever the description is mentioned.
>
>Download program DIPOLE3 from the website below in a few seconds and run
>immediately. No unzipping inconvenience. In view of the advertised
>popularity of the G5RV the basic data can be entered in the program with a
>single key-stroke.
>
>You must enter data for the 1/2-size G5RV, or any other dipole, yourself.
>
>Incidentally, the best performance multi-band dipole is of a random length
>which fits into your back yard, fed with any random length of 450-ohm line,
>or a 500 or 600-ohm open wire line, which also fits in your back yard, in
>conjunction with a tuner. Spend your money on the tuner. Simplicity
>Invariably Rules!
>---
>...
>Regards from Reg, G4FGQ
>For Free Radio Design Software go to
>http://www.btinternet.com/~g4fgq.regp
>...
>
Jim, take Reg's advice seriously concerning what he says is the best performance
multi-band dipole. He's exactly right. Forget the 1/2 size G5RV.

Walt, W2DU

2207. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 19:36:44 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4128f733_8@corp.newsgroups.com>
Source record: 90528

Yuri Blanarovich wrote:
> People can be wrong, and usually appreciate if they are corrected or shown
> better way.

To be fair, W8JI usually slowly moves himself off his always/never
rail position to a more reasonable often/hardly-ever position. Some
time ago, he and others on this newsgroup asserted that absolutely
nothing changes when one moves the balun from the tuner output to
the tuner input. The subject came up recently on eHam.net.

> W8JI wrote:
>> If you draw a floating network on paper and look at what happens,
>> you'll see moving the balun results in the same stress on the core
>> regardless of the side of the tuner the balun is on.

i.e. a paper solution indicates that nothing changes, but ...

>> In real life, stray capacitances from the network to ground modify
>> the behavior of the system when the balun is moved, but the change
>> is generally both small and unpreditable.

i.e. changes can and do actually happen in the real world.

As in any distributed network configuration with reflections, if the
balun changes the phase between the forward common-mode current and
the reflected common-mode current, that can shift the location of
the common-mode current nodes.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2208. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 19:41:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4128f838$1_8@corp.newsgroups.com>
Source record: 90529

Jim Leder wrote:

> I can read all kinds of info about the 'full sized' G5RV, but I have yet to
> find any detailed performance info on the G5RV Jr.
>
> Like:
> - The original G5RV was designed mainly for 20 meters, with acceptable
> performance on 80/40 and if you are lucky maybe 17. What might be the
> optimum band for the Jr., if it has one?

Antennas are scalable with frequency. The full-sized G5RV is a
pretty good performer on 80m, 40m, and 20m (also 12m). The 1/2
sized G5RV will therefore be a pretty good performer on 40m,
20m, and 10m.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2209. Re: Serious radiation questin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 22:42:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgb7g6afh1@titan.btinternet.com>
Source record: 90530

I'll just take a guess.

If you take a half-wave dipole and gradually bend it into a circle, then,
for a constant current, the field set up at a distance will crudely reduce
in proportion to the direct distance between its ends.

The greatest distance between its ends is when it is just a straight wire.

Reg.

2210. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 23:42:39 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822194239.04837.00001710@mb-m12.aol.com>
Source record: 90531

>
>> Can you send me label from your last issue and how much do I owe you?
>
>
>No I can't. I junked the copies I had.
>
>>Interesting that most noise about Radiosporting is made by people who
>>didn't subscribe but are somehow "cheated".
>
>
>I wasn't one of them if you want people on this NG to believe that. I
>did subscribe.
>
>Henry WA0GOZ
>

I have the printouts of all issues that were sent out. According to my records you received last free issue of Radiosporting 8601 - Jan. 1986. The only subscribers with WA0 calls were WA0JRP, WA0NPK and later WA0WOF. You and WA0EUP received only freebies and I have no record of subscriptions. Somebody is making things up or dreaming and making false accusations.

Just wonder what the Radiosporting has to do with my posting?

73 Yuri

2211. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 23:58:37 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822195837.04837.00001711@mb-m12.aol.com>
Source record: 90532

Reg,
the subject of discussion on TopBand reflector was conductivity of earth under the beverage or effect of wire placed on the ground and its effect on the preformance of the Beverage antenna (above). Here is the repeat of W8JI portion of the posting on this subject:

>>The only thing that prevents people from shooting themselves
in the foot with the wire below the Beverage is the wire
couples to the lossy media below it so well it becomes very
lossy, and of course that means it doesn't help with
stability or termination.<<

- "" wire below the Beverage"" there is aconsiderable discussion on this subject there.
My problem is with the statement " the wire
couples to the lossy media below it so well it becomes very
lossy"
As far as I know, to make wire lossy, one must increase resistance by some means. In my book, wire maintains its conductivity regardless what it is laying on, and that overrides the effect of lossy ground underneath.

Speaking of Beverages and their poor performance over good ground or salt water, most people find it is true, some claim still good performance on LF and MF. While operating from VE1ZZ place and using his beverages, he has one that is running over the rocky ground, slightly down hill, 90 deg towards the salt water and it is terminated via resistor into the stainless steel hubcap in the salt water. That sucker beats anything else we tried, pair of staggered beverages or phased ones. So it appears that Beverage stretched over poor ground but terminated in the good ground beats their "better" cousins. We are talking about 160 - 40m and definitely not using it for transmit.
This is reality in by old wives.

Regards, Yuri, K3BU.us

>
>Yuri, I agree in general with your, not out of place, semi-technical
>sentiments.
>
>But regarding lossy wires, laid on the ground, as for a Beverage which is
>often supposed to depend on ground loss, we must be very careful of making a
>virtue out of a vice.
>
>I venture to say the higher an LF Beverage was above the ground the more
>efficient, both on receive and transmit, it would have become. The reason a
>wire as long the Beverage was so near to the ground was because of the high
>cost of a lot of very tall poles.

>
>The rest is old-wives' tales.
>
>Or have I inadvertently changed the subject?
>---
>Reg.
>
>
>
>
>
>
>
>

2212. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-22 23:59:44 UTC
From: wa0goz@arrl.net
Message-ID: <41293370.793A@arrl.net>
Source record: 90536

I just looked through a bunch of old mags and found one from you. I is
the April/May 1989 issue. Funny how I didn't subscribe, but I have a
copy with a mailing label with a date later than your "records". mmmmmm.

Henry WA0GOZ

Yuri Blanarovich wrote:
>
> >
> >> Can you send me label from your last issue and how much do I owe you?
> >
> >
> >No I can't. I junked the copies I had.
> >
> >>Interesting that most noise about Radiosporting is made by people who
> >>didn't subscribe but are somehow "cheated".
> >
> >
> >I wasn't one of them if you want people on this NG to believe that. I
> >did subscribe.
> >
> >Henry WA0GOZ
> >
>
> I have the printouts of all issues that were sent out. According to my records
> you received last free issue of Radiosporting 8601 - Jan. 1986. The only
> subscribers with WA0 calls were WA0JRP, WA0NPK and later WA0WOF. You and WA0EUP
> received only freebies and I have no record of subscriptions. Somebody is
> making things up or dreaming and making false accusations.
>
> Just wonder what the Radiosporting has to do with my posting?
>
> 73 Yuri

2213. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 00:05:00 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822200500.04837.00001712@mb-m12.aol.com>
Source record: 90533

> My request is to see a clear statement in Standard English (BCC
>English is ok) of what W8JI is contending.
>
> 73 Mac N8TT

Judge by yourself, here is the complete posting, rest of the discussion is on
http://lists.contesting.com/archives/html/Topband/2004-08/index.html
Yuri

> I'd say that given "average" elevation angles for DX, you
should treat both
> arrival elevation angle and tilt from ground loss as being
roughly equal
> factors.

None of that matters anyway Chuck when the pattern of the
antenna isn't any good. We know a lot more about antenna
patterns and how antennas respond over earth than we did
back in the earlier part of the 20th century.

The fact is we want the horizontal area of the antenna to
have as much response as possible. If we put a wire below
the antenna that *really* changed things we know by where it
is located it could only make things worse.

A Beverage responds in the horizontal area only because of
the high loss in the media below the antenna. Without a
highly conductive media below the antenna, it's a cloverleaf
with a null off the ends caused by the vertical ends
dominating the response.
It's all in the antenna pattern. We can have all the tilted
wave we like but if the antenna has a zero response slice
looking at it and major lobes 20dB stronger 45 degrees to
either and off both ends, we won't be very happy with the
results.

The only thing that prevents people from shooting themselves
in the foot with the wire below the Beverage is the wire
couples to the lossy media below it so well it becomes very
lossy, and of course that means it doesn't help with
stability or termination.

If you think it does, lay a very long wire on the ground and
measure the input impedance. See how it looks compared to a
~50 ohm ground rod connection....I guarantee it won't look
pretty.

73 Tom

2214. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 00:11:03 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822201103.04837.00001713@mb-m12.aol.com>
Source record: 90534

>This is reality in by old wives.
>

Huh? :-)
Maybe I was trying to say "This is reality even by old wives?"

I must be watching US beach volleyball chicks in their bikinis too much. They won anyway and go to finals for gold. GO US!

Yuri, K3BUm

2215. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 00:19:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0fcii09mcrg9re46k4anrcm9n5l64lfh05@4ax.com>
Source record: 90535

On Sun, 22 Aug 2004 17:51:47 -0400, "J. McLaughlin"
<JCM@Power-Net.Net> wrote:

> I have read several times the quotation that has prompted
>discussion. (see below) The statement uses "it" too many times for me
>to know what is being contended.
...
> My request is to see a clear statement in Standard English (BCC
>English is ok) of what W8JI is contending.

Hi Mac,

The danger of this is these "arguments" (offered on the behalf of a otherwise silent party) is that they have every chance of being under reported, and over extended. It quickly devolves to "so-and-so thinks...." to triumphantly prove it-just-ain't-so.

It reminds me of past statements offered as V9SRB's logic in his behalf that never were suggested by him nor even intimated. As a one-time shot against a full statement, I suppose that is enough to critique, but I have seen this hothouse orchid bloom into fully fleshed philosophies projected onto the silent protagonist by unrelated statements forced into continuity by the critic presuming a sub-context.

If Yuri, you have some beef against Tom, I can fully concur in his personality taking you there. Has he offered howlers? You bet! Is he guilty of other rhetorical shenanigans - don't we know. Is he demonstrably skilled? Well, yes, that too.

[warning to readers, metaphors employed to a sly comic interlude]

Suffice it to say no Radio Moscow program ever interviewed a Radio Free Europe commentator to serious issues - why would you expect such a re-alignment of the heavens for your sake?

Ask George W for help; you might find he would take on the evil Dr. Joyce Brothers to solve our moral problems with Howard Stern. ;-)

73's
Richard Clark, KB7QHC

2216. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 02:15:56 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10iikp6j71l1291@corp.supernews.com>
Source record: 90537

Dear Richard and others:
You have helped me to understand what the issues are likely to be,
what they could be, and even a glimpse of what they might become.
I shall file in my list of
interesting-things-to-think-about-in-a-serious-way the issue of what
happens to the behavior a wave antenna having a "wire" on the ground
directly under the antenna wire. I do recall dealing with a similar
issue where I was verifying a modeling issue by testing the Zo of a very
long wire over a conducting plane. Might be a paper in there somewhere.

It reminds me of a fundamentals of mathematics class that I took
from Prof. Halmos. Perhaps his greatest genius was his ability
frequently to suggest interesting problems.

I shall exit stage right 'till I have "thunk" through the
interesting bits. Thank you for your assistance.

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:0fcii09mcrg9re46k4anrcm9n5l64lfh05@4ax.com...
> On Sun, 22 Aug 2004 17:51:47 -0400, "J. McLaughlin"
> <JCM@Power-Net.Net> wrote:
>
> > I have read several times the quotation that has prompted
> >discussion. (see below) The statement uses "it" too many times for
me
> >to know what is being contended.
> ...
> > My request is to see a clear statement in Standard English (BCC
> >English is ok) of what W8JI is contending.
>
> Hi Mac,
>
> The danger of this is these "arguments" (offered on the behalf of a
> otherwise silent party) is that they have every chance of being under
> reported, and over extended. It quickly devolves to "so-and-so
> thinks...." to triumphantly prove it-just-ain't-so.
>
> It reminds me of past statements offered as V9SRB's logic in his
> behalf that never were suggested by him nor even intimated. As a
> one-time shot against a full statement, I suppose that is enough to

> critique, but I have seen this hothouse orchid bloom into fully
> fleshed philosophies projected onto the silent protagonist by
> unrelated statements forced into continuity by the critic presuming a
> sub-context.
>
> If Yuri, you have some beef against Tom, I can fully concur in his
> personality taking you there. Has he offered howlers? You bet! Is
> he guilty of other rhetorical shenanigans - don't we know. Is he
> demonstrably skilled? Well, yes, that too.
>
> [warning to readers, metaphors employed to a sly comic interlude]
>
> Suffice it to say no Radio Moscow program ever interviewed a Radio
> Free Europe commentator to serious issues - why would you expect such
> a re-alignment of the heavens for your sake?
>
> Ask George W for help; you might find he would take on the evil Dr.
> Joyce Brothers to solve our moral problems with Howard Stern. ;-)
>
> 73's
> Richard Clark, KB7QHC

2217. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 02:39:54 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822223954.04872.00001740@mb-m12.aol.com>
Source record: 90538

>
>I just looked through a bunch of old mags and found one from you. I is
>the April/May 1989 issue. Funny how I didn't subscribe, but I have a
>copy with a mailing label with a date later than your "records". mmmmmm.
>
>Henry WA0GOZ
>

Can you describe what is on the label, with codes if any please?

Thanks, Yuri

2218. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 02:48:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vgmii01nkgmkee2j1u9pc32ug3f5lun3jg@4ax.com>
Source record: 90539

On Sun, 22 Aug 2004 22:15:56 -0400, "J. McLaughlin"
<JCM@Power-Net.Net> wrote:

> I shall file in my list of
>interesting-things-to-think-about-in-a-serious-way the issue of what
>happens to the behavior a wave antenna having a "wire" on the ground
>directly under the antenna wire. I do recall dealing with a similar
>issue where I was verifying a modeling issue by testing the Zo of a very
>long wire over a conducting plane.

Hi Mac,

Where the discussion remains technical, it seems to me that both Tom
and Yuri are saying the same thing. On the other hand, they may say
it differently, but the conclusions seem to agree.

Your experience and studies to this point would be instructive.

73's
Richard Clark, KB7QHC

2219. Re: Preferred antenna location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 02:59:33 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <74dWc.15050$%n4.4916@bignews6.bellsouth.net>
Source record: 90540

you'll find as the height of the antenna increases, the need for a
'sweet-spot' decreases - because the sweetest spot is up high.

"Ron" <rmrippy@hotmail.com> wrote in message
news:CMLVc.201098$tH1.10623682@twister.southeast.rr.com...
> Other than locating an antenna as high as posible and in open space, are
there
> "sweet spots" that behave like funnels for radio waves? By moving a
portable
> receiver around to find the strongest signal, I have noticed that certain
> locations (I'm talking feet and yards, not miles) produce much more signal
> strength than others. Of course, I also end up moving the antenna angle
too
> which may be responsible for this behavior. Just wondering if this effect
is
> worth considering when installing an antenna. Or am I just finding the
> strongest lobe of the antenna pattern?
>
> Ron, W4TQT
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2220. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:01:53 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <B6dWc.4861$eu1.141108@twister.southeast.rr.com>
Source record: 90541

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040817071246.25456.00003339@mb-m29.aol.com...
> > So, when you tell me to "forget the igloo", you seem to have placed
> >yourself in a position where you think you know how to evaluate antenna
> >efficiency and that I dont. I dont think you are *that* smart.
> >
> > Jerry
>
>
> You win, I ain't so smart as I thought. :-)
> I thought that antenna is supposed to radiate RF in the direction and with
> pattern one desires. That's what I want to measure, how effective radiator
it
> is, how much RF it produces at the point of interest.
> If you want to know how well it works as a heater, more power to you.
> I am not in a pissing contest who is "smarter", I was trying to convey
some
> practicality and what I do and what I am interested in.
> Over and out!
>
> Back to DR1 (www.computeradio.us)
>
> Yuri, K3BU

I was under the impression that radiation efficency was pretty much a"
no-brainer".If the antenna is built of quality materials with good
workmanship the antenna would be an efficent radiator with little ohmic or
dielectric losses. The exception to this of course would be antennas that
use an earth ground. I just found I was losing at least 3 db to heating up
the ground.

Jimmie

2221. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:11:29 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822231129.04872.00001745@mb-m12.aol.com>
Source record: 90542

>KB7QHC:
>Where the discussion remains technical, it seems to me that both Tom
>and Yuri are saying the same thing. On the other hand, they may say
>it differently, but the conclusions seem to agree.
>

Huh? Which "same thing?"

Yuri

2222. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:12:43 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <LgdWc.4937$eu1.142105@twister.southeast.rr.com>
Source record: 90543

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040817072211.25456.00003340@mb-m29.aol.com...
> >Dear Group:
> > One may see a patent application for the "SteppIR" antenna on the
> >PTO's web site.
> >
> > Look for:
> > 20020171598 Tunable antenna system
> >
> > Punch in the above number here:
> >http://appft1.uspto.gov/netahtml/PTO/srchnum.html
> >
> > The application issued as patent 6,677,914.
> >
> > I can not remember if this has been posted. 73 Mac N8TT
>
>
>
> Thanks, very well done!
>
> How can you see the drawings?
>
> Yuri, K3BU

How is it I get the feeling they are not trying to develope the remotely tunable antenna. Seem to me someone just wants to have the patent on the idea

2223. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:20:34 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822232034.04872.00001747@mb-m12.aol.com>
Source record: 90544

>
>I was under the impression that radiation efficency was pretty much a"
>no-brainer".If the antenna is built of quality materials with good
>workmanship the antenna would be an efficent radiator with little ohmic or
>dielectric losses. The exception to this of course would be antennas that
>use an earth ground. I just found I was losing at least 3 db to heating up
>the ground.
>
>Jimmie
>
>
>

Keep digging, you will find more lost dBs. Things get aggravated in loaded antennas when you start inserting coils, loading elements, folding them back, etc. Efficiency is roughly proportional to the area under the current distribution curve along the radiator. That can be affected by any of the shortening "miraculous" gizmos, like Vincent DLM antenna. It is not just heat loses in resistances. You can't have "perfectly" conducting piece of 1 ft copper tubing be as effcient as 130 ft full size radiator on 160m.
Getting smarter, Eh ? :-)

Yuri, K3BU

2224. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:23:15 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040822232315.04872.00001748@mb-m12.aol.com>
Source record: 90545

>
>How is it I get the feeling they are not trying to develope the remotely
>tunable antenna. Seem to me someone just wants to have the patent on the
>idea
>

Huh?
They developed it, making it and selling like a hotcakes. That's the idea, to have a patent on the idea for terrific product!

Yuri, K3BU

2225. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:30:43 UTC
From: wa0goz@arrl.net
Message-ID: <412964E3.29F1@arrl.net>
Source record: 90547

Yuri Blanarovich wrote:
>
> >
> >I just looked through a bunch of old mags and found one from you. I is
> >the April/May 1989 issue. Funny how I didn't subscribe, but I have a
> >copy with a mailing label with a date later than your "records". mmmmmm.
> >
> >Henry WA0GOZ
> >
>
> Can you describe what is on the label, with codes if any please?
>
> Thanks, Yuri

Sure

WA0GOZ S 9005
Henry Knoll
10081 103rd St. No.
Stillwater
MN 55082

2226. Isotron 6 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 03:30:57 UTC
From: lkljet@aol.com
Message-ID: <20040822233057.23951.00004310@mb-m28.aol.com>
Source record: 90546

Has anyone had the Isotron 6 meter antenna? Do they work well?
Thanks Ken

2227. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 04:03:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <51rii01edj6gemq0c3hpolgsc6tkm3b2lr@4ax.com>
Source record: 90548

On 23 Aug 2004 03:11:29 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:

>>KB7QHC:
>>Where the discussion remains technical, it seems to me that both Tom
>>and Yuri are saying the same thing. On the other hand, they may say
>>it differently, but the conclusions seem to agree.
>>
>
>Huh? Which "same thing?"
>
>Yuri

Which difference?

73's
Richard Clark, KB7QHC

2228. Re: Isotron 6 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 04:04:41 UTC
From: derswede@aol.comspam.com
Message-ID: <20040823000441.04751.00001614@mb-m12.aol.com>
Source record: 90549

<< Has anyone had the Isotron 6 meter antenna? Do they work well?
Thanks Ken >>

Hmmm...isn't the "claim to fame" of the Isotron the small size? A 6M loop is going to be small...look at the halos and omnis like the PAR OmniAngle...quite small footprint. Heck, I use a travelling dipole made from two RatShak 72" whips in a block of nyloc! Think it would be better to "roll your own" in this case. Do a search for 6m halos or go to www.cebik.com for some good 6M antenna info. If you prefer not to roll your own, there are some excellent loops out there...I have several homebrew loops and one of Dale's fine Stressed Moxons for my 6M solutions.

A

2229. Re: vertical ant construction tips

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 04:10:15 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408222010.63d01684@posting.google.com>
Source record: 90550

tclay@qmc.ph.msstate.edu wrote in message news:<87isbbhta4.fsf@qmc.ph.msstate.edu>...
> >I don't agree. A 20M yagi half-element is around 17 feet long, a
> >self-supporting 20M vertical is around 34 feet tall. In your context
> >he needs to look at the taper schedule for a 40M yagi to get the
>
> You are right- I missed the "vertical dipole" part :)

Roger that.

>
> Torsten
> N4OGW

b.

2230. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 04:24:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a9rii0pc31ussctuet7l8rnd9b393i11vo@4ax.com>
Source record: 90551

On Mon, 23 Aug 2004 03:01:53 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>I was under the impression that radiation efficency was pretty much a"
>no-brainer".If the antenna is built of quality materials with good
>workmanship the antenna would be an efficent radiator with little ohmic or
>dielectric losses. The exception to this of course would be antennas that
>use an earth ground. I just found I was losing at least 3 db to heating up
>the ground.

Hi Jimmie,

3dB heating up the ground with an antenna that has 5dBi gain in the preferred direction and launch angle compared to an antenna that has no ground and 0dBi gain in the same preferred direction and launch angle may give you pause and allow the worms some comfort on a cold day.

Workmanship and quality materials tests those reputations vastly more for smaller antennas than standard sized ones. Those 1 meter loops used for HF are not rated for the lower bands for very good reasons, and they claim (and I believe them) high standards for their product. However, if you could resonate them in the 160M band, you'd be lucky to see 1% efficiency.

Small antennas carry a lot of baggage, and any claims of efficiency superior to the standard antennas they replace are suspect. When they qualify that efficiency in creative terms like "more efficient per unit length" you would do well to skip that and ask for field strengths out 10 miles. A model called the eh had an FCC style site survey performed to which they crowed it proved their design was equal or better to a full size antenna. The data revealed results 10 and 20 miles out were 15-17dB down below that same standard they were so much more efficient than.

73's
Richard Clark, KB7QHC

2231. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 07:15:11 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <gg1ji0149g0p1aef4p13b6kljfb8n69fe6@4ax.com>
Source record: 90552

On Mon, 23 Aug 2004 04:24:52 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Workmanship and quality materials tests those reputations vastly more
>for smaller antennas than standard sized ones. Those 1 meter loops
>used for HF are not rated for the lower bands for very good reasons,
>and they claim (and I believe them) high standards for their product.
>However, if you could resonate them in the 160M band, you'd be lucky
>to see 1% efficiency.

You would be lucky if you could get 10 % efficiency at 40 m for these
1 m loops. Since the radiation resistance is inversely proportional of
the fourth power of frequency and the skin effect losses proportional
to the square root frequency, one could expect to get nearly 1 %
efficiency at 80 m and well below 0.1 % efficiency at 160 m.

On the European 135 kHz LF band, the practical vertical antennas are
usually less than 0.01 .. 0.02 WL, the estimated efficiency is less
than 0.1 %, so more than 1 kW has to be driven into the antenna to
even get 1 W of ERP. This 1 W ERP limit is used by many countries and
still narrow band contacts of several thousand kilometers are made.

Unfortunately, trying to compensate the low efficiency in a small
magnetic loop with a high transmitter power is not very practical,
since the voltages would be huge.

Thus, if some exotic small antenna with inevitably low efficiency is
to be used, I would first check that it can constantly handle the full
legal limit power, so that it would be possible to compensate for the
lower efficiency.

The low antenna efficiency is not much of a problem in receiving on
LF, MF and lower HF frequencies, since the band noise is still well
above the receiver front end noise. However, on upper HF and above, a
low efficiency will degrade the reception, especially if the receiver
noise figure is high (which it often is in HF receivers that try to
maximise the intermodulation performance).

Paul OH3LWR

2232. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 09:04:23 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <oqiWc.8022$L94.3607@fed1read07>
Source record: 90553

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:a9rii0pc31ussctuet7l8rnd9b393i11vo@4ax.com...
> On Mon, 23 Aug 2004 03:01:53 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >I was under the impression that radiation efficency was pretty much a"
> >no-brainer".If the antenna is built of quality materials with good
> >workmanship the antenna would be an efficent radiator with little ohmic
or
> >dielectric losses. The exception to this of course would be antennas that
> >use an earth ground. I just found I was losing at least 3 db to heating
up
> >the ground.
>
> Hi Jimmie,
>
> 3dB heating up the ground with an antenna that has 5dBi gain in the
> preferred direction and launch angle compared to an antenna that has
> no ground and 0dBi gain in the same preferred direction and launch
> angle may give you pause and allow the worms some comfort on a cold
> day.
>
> Workmanship and quality materials tests those reputations vastly more
> for smaller antennas than standard sized ones. Those 1 meter loops
> used for HF are not rated for the lower bands for very good reasons,
> and they claim (and I believe them) high standards for their product.
> However, if you could resonate them in the 160M band, you'd be lucky
> to see 1% efficiency.
>
> Small antennas carry a lot of baggage, and any claims of efficiency
> superior to the standard antennas they replace are suspect. When they
> qualify that efficiency in creative terms like "more efficient per
> unit length" you would do well to skip that and ask for field
> strengths out 10 miles. A model called the eh had an FCC style site
> survey performed to which they crowed it proved their design was equal
> or better to a full size antenna. The data revealed results 10 and 20
> miles out were 15-17dB down below that same standard they were so much
> more efficient than.
>
> 73's
> Richard Clark, KB7QHC

Certain products that include antennas may have to be tested for emissions
on a standardized site called an OATS, but that is a very bad choice for

antenna measurements (distance is 10 meters at most, and there is a perfectly conducting ground plane).

As an engineer, I prefer to see performance data obtained in as simple an environment as possible. But as a ham, I also have to admit that most people don't use antennas under "test range" conditions. I can easily imagine an antenna that looks good in "test range" conditions, but is badly influenced by real-life items like proximity to ground, chimneys and trees.

Does the FCC (or anyone else) define any standard site for measurement of antennas? Could the closest thing be NIST's antenna calibration ranges?

Ed
wb6wsn

2233. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 09:11:03 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <DwiWc.8023$L94.5804@fed1read07>
Source record: 90554

<wa0goz@arrl.net> wrote in message news:412964E3.29F1@arrl.net...
> Yuri Blanarovich wrote:
> >
> > >
> > > >I just looked through a bunch of old mags and found one from you. I is
> > > >the April/May 1989 issue. Funny how I didn't subscribe, but I have a
> > > >copy with a mailing label with a date later than your "records".
mmmmmm.
> > >
> > > >Henry WA0GOZ
> > >
> >
> > Can you describe what is on the label, with codes if any please?
> >
> > Thanks, Yuri
>
> Sure
>
> WA0GOZ S 9005
> Henry Knoll
> 10081 103rd St. No.
> Stillwater
> MN 55082

Wow, that's looks like hard proof to me. Now Yuri can refund a couple of dollars to Henry, gain spiritual peace over resolving that debt from 1989, and the world will be a better place for all.

Maybe I could get all those deceased computer mags from the 1980's to refund their defaulted subscription balances to me, and I could go have a magnificent banquet dinner for two at McDonalds.

Ed
wb6wsn

2234. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 09:16:42 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <WBiWc.8024$L94.329@fed1read07>
Source record: 90555

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040822232315.04872.00001748@mb-m12.aol.com...
> >
> >How is it I get the feeling they are not trying to develope the remotely
> >tunable antenna. Seem to me someone just wants to have the patent on the
> >idea
> >
>
> Huh?
> They developed it, making it and selling like a hotcakes. That's the idea,
to
> have a patent on the idea for terrific product!
>
> Yuri, K3BU

No, the idea is to invent something, make it, sell it like hotcakes, and
then sell the business when all the me-too's show up. The patent is just a
very time-consuming & expensive official license to sue whoever appears to
be improperly competing with you. Your lawyer may not help you with circuit
design, but he will advise that you go for a patent.

Ed
wb6wsn

2235. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 09:44:22 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408230144.3c10d8bd@posting.google.com>
Source record: 90556

William Mutch <wcm1@NOSPAM.cornell.edu> wrote

> I've used bees wax and it has worked fine, though I have no way to
> measure losses, if any. You can melt it to get your toroid free if you
> need to. I have done this when wanting to put the same balun on
> different feedlines.

I looked up the dielectric constants of a few materials:
http://zhangzc.jahee.com/chemcai/Dielectric%20Constant%20Table.htm

air ~1

or

paraffin wax 2.1-2.5
beeswax 2.7-3.0 very close to paraffin!
urethane (not foamed) 3.2 (polyurethane?)
cast epoxy 3.6
polyvinylchloride 3.4 (common wire insulating material)

Potting a balun coil in these materials does substantially increase
stray capacitance.

The mil. circuits I saw potted in wax or paraffin were audio, not RF.

I guess foamed polyurethane has a modest dielectric constant.

I read that some commercial RF transformer (e.g. RF System's so called
Magnetic Longwire Balun) are filled with polyurethane foam. I also
found a 4X ham discussing and blessing PU foam at
http://lists.contesting.com/archives/html/Topband/2003-11/msg00038.html

The same article also warns against potting in epoxy, as it boosts
stray capacitance in transformers designed for air insulation. Wax and
paraffin are better than epoxy, yet they may both be troublesome.

The PU foam I can get is the common consumer "monocomponent" type. It
is a misnomer, as it requires ambient humidity to react and cure. It
will not properly foam inside completely closed environments unless
water is provided.

I tested foaming in a foot-long 1/2 in. plastic pipe, not pre-wetted,
and the result was that foam properly formed only for the first inch
or so at both ends, while the material collapsed into a film in the
middle.

Instructions correctly advise to 1) wet the surfaces the foam will be
in contact with, 2) if one needs to fill a deep cavity, deposit foam

in layers and allow each layer to set and dry.

The resulting foam is stiff and does form a light bond with plastic, but is rather easily removed if the need arises.

My balun box is small, at most 3/4" deep, all metal contacts are already coated with thin epoxy, and the transformer wire is PVC coated too, so a momentary contact with water spray, soon to be soaked up by the PU, should be OK.

I'll do another test in a small plastic box containing some wiring, all pre-wetted. As the foam keeps expanding as it sets it may be a good idea to avoid closing and bolting the box lid before it cured completely, or at very least to provide some escape holes. More later.

2236. Tuning Schumann coil?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 11:21:34 UTC
From: Tim Robbins <trobbins2002@artex.com>
Message-ID: <ckkji01aiqagf0fgqim1o377ebi1fuc69g@4ax.com>
Source record: 90557

I have a 300 long x 50mm dia. Schumann coil that measures 18.75KOhms.
I have no way to measure inductance. It has an annealed steel core 1M
long.

What capacitor value do I need to tune it to an 8Hz center frequency?

Thank you,

Tim

2237. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 12:33:25 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <$VzTYJGVQeKBFA5j@ifwtech.co.uk>
Source record: 90558

SpamHog wrote:
>
>My balun box is small, at most 3/4" deep, all metal contacts are
>already coated with thin epoxy, and the transformer wire is PVC coated
>too, so a momentary contact with water spray, soon to be soaked up by
>the PU, should be OK.
>
Agreed. However, the PU foams that we buy in DIY stores do tend to soak up water into the outer layer, especially after the smooth surface has been cut to trim off any excess.

Some foams are notably better than others in this respect, and it might be better to look for the special 'closed cell' foams that are specifically rated for use in for flotation aids.

>I'll do another test in a small plastic box containing some wiring, all
>pre-wetted. As the foam keeps expanding as it sets it may be a good
>idea to avoid closing and bolting the box lid before it cured
>completely, or at very least to provide some escape holes. More later.

Before you do, you'd better read this:
http://www.diyfaq.org.uk/humour.html#foam

For 'canoe', read 'kayak'... and don't say that nobody warned you!

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2238. Re: Isotron 6 meter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 12:54:10 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <h4qji053aiehk4qk6e5v16ma5317hhkcd3@4ax.com>
Source record: 90559

On 23 Aug 2004 04:04:41 GMT, derswede@aol.comspam.com (AA) wrote:

><< Has anyone had the Isotron 6 meter antenna? Do they work well?
>Thanks Ken >>
>
>Hmmm...isn't the "claim to fame" of the Isotron the small size? A 6M loop is
>going to be small...look at the halos and omnis like the PAR OmniAngle...quite
>small footprint. Heck, I use a travelling dipole made from two RatShak 72"
>whips in a block of nyloc! Think it would be better to "roll your own" in
>this case. Do a search for 6m halos or go to www.cebik.com for some good 6M
>antenna info. If you prefer not to roll your own, there are some excellent
>loops out there...I have several homebrew loops and one of Dale's fine Stressed
>Moxons for my 6M solutions.
>
>A

The Sept. 2004 QST has an article on building a 6-m. halo, which
wouldn't be any bigger than an Isotron, would probably look a sight
better :-)

Bob
k5qwg

2239. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 12:59:45 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040823085945.04711.00001264@mb-m21.aol.com>
Source record: 90560

>
>>>KB7QHC:
>>>Where the discussion remains technical, it seems to me that both Tom
>>>and Yuri are saying the same thing. On the other hand, they may say
>>>it differently, but the conclusions seem to agree.
>>>
>>
>>Huh? Which "same thing?"
>>
>>Yuri
>
>Which difference?
>
>73's
>Richard Clark, KB7QHC

What are you refering to? Can you be more specific?
Wire laying on the ground "changing" resistance or terminating Beverage in the ocean?

Yuri

2240. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 13:08:26 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040823090826.04711.00001265@mb-m21.aol.com>
Source record: 90561

>> They developed it, making it and selling like a hotcakes. That's the idea,
>to
>> have a patent on the idea for terrific product!
>>
>> Yuri, K3BU
>
>No, the idea is to invent something, make it, sell it like hotcakes, and
>then sell the business when all the me-too's show up. The patent is just a
>very time-consuming & expensive official license to sue whoever appears to
>be improperly competing with you. Your lawyer may not help you with circuit
>design, but he will advise that you go for a patent.
>
>Ed
>wb6wsn
>

You can file patent yourself and it doesn't have to be very time and money consuming. In some situations it is worth it (Laser) in many situations patents remain unutilized. Often it is deterrent to me-too's and if you have a lawyer in the family, it could be reasonable.

Yuri

2241. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 13:58:49 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2oubgiFepg7pU1@uni-berlin.de>
Source record: 90562

"Ed Price" wrote
> I can easily imagine an antenna that looks good in
>"test range" conditions, but is badly influenced by
>real-life items like proximity to ground, chimneys and trees.
> Does the FCC (or anyone else) define any standard site
>for measurement of antennas? Could the closest thing be
>NIST's antenna calibration ranges?

Most test ranges are designed to measure (as accurately as practical) the radiation pattern of the antenna hardware alone, and normally in relative field only -- not in absolute gain.

The affect of the installation environment on the free-space patterns of an antenna vary widely. The azimuth patterns of FM broadcast transmit antennas are sometimes measured at the OEM's test range while mounted on a section of tower, and in the mounting configuration to be used for the final installation. That will show how the signal will be "launched," but gives no final data about how well the antenna will perform after installation. That will depend on its height above ground and propagation conditions along the path from the transmit site to the receiver.

RF

Visit http://rfry.org for FM broadcast RF system papers.

2242. unable to tune doublet at higher freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 14:05:16 UTC
From: Larry Gagnon <lagagnon@fakeuniserve.com>
Message-ID: <pan.2004.08.23.14.05.12.862857@fakeuniserve.com>
Source record: 90563

I have a 135' long doublet, 45' in the air fed with 450 ohm ladderline. It tunes fine and works well through an MFJ tuner on all bands up to 21MHz. Above 21MHz I have a very difficult time tuning the antenna to get any SWR below 3:1. I cut 6' off the feedline when it was finally dressed into my shack and that made it worse. I have now reinstalled the extra 6' and that is better for tuning, but not yet perfect. I guess I'll just have to keep adding or subtracting small amounts of feedline to get it right?

If so, are we talking inches or what? Any ideas appreciated.

Larry VE7EA

--
****
to reply via email remove "fake"

2243. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 15:25:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j22ki0d77kpuoa6vdd459va7erfs0eu48v@4ax.com>
Source record: 90564

On 23 Aug 2004 12:59:45 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:
>Wire laying on the ground "changing" resistance

Hi Yuri,

As Mac said, there are many "its" in the quote. However the vague combinations do not resolve to different interpretations as you persist. The extra wire leads to the same conclusion you BOTH describe and that is Beverage-like antenna characteristics. As that is a unique consequence of ground's retarding the wavefront, it necessarily follows that Tom maintains (and directly states) that the extra wire does NOT interfere with that action. He states why - tight coupling. He no where states that metallic copper assumes ohmic loss as the loss is a consequence of proximity to earth. Further, I've seen no statement from you or Tom that maintains the extra wire destroys the Beverage-like antenna characteristic, hence there is not a hair's width difference between you two.

73's
Richard Clark, KB7QHC

2244. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 15:30:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f43ki0pasnff3ke3mjbjsjraouaogeh6mm@4ax.com>
Source record: 90565

On Mon, 23 Aug 2004 02:04:23 -0700, "Ed Price" <edprice@cox.net>
wrote:

>Does the FCC (or anyone else) define any standard site for measurement of
>antennas?

Hi Ed,

It is called in situ. A field survey is required in the process of
licensing.

73's
Richard Clark, KB7QHC

2245. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 15:34:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ab3ki0hdkc2fmie9in3qhthte7dsan5ap3@4ax.com>
Source record: 90566

On Mon, 23 Aug 2004 02:16:42 -0700, "Ed Price" <edprice@cox.net>
wrote:

>Your lawyer may not help you with circuit
>design, but he will advise that you go for a patent.

Hi Ed,

You forgot to ad that patents are ego certificates. As for circuit design advice, my lawyer could do that. He also had degrees in chemistry and mechanical engineering. However, he never intruded into anything but the legal claims language which he could craft with the baroque style of the best of them. I think I average 200 for each of my patents.

73's
Richard Clark, KB7QHC

2246. Re: unable to tune doublet at higher freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 15:46:21 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <hjoWc.31359$9Y6.9848@newsread1.news.pas.earthlink.net>
Source record: 90567

Larry
You're trying to feed the antenna at a current node.
Change the length of the antenna, not the feed.
Try asymmetric legs.
73
H.
NQ5H

"Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
news:pan.2004.08.23.14.05.12.862857@fakeuniserve.com...
> I have a 135' long doublet, 45' in the air fed with 450 ohm ladderline. It
> tunes fine and works well through an MFJ tuner on all bands up to 21MHz.
> Above 21MHz I have a very difficult time tuning the antenna to get any SWR
> below 3:1. I cut 6' off the feedline when it was finally dressed into my
> shack and that made it worse. I have now reinstalled the extra 6' and that
> is better for tuning, but not yet perfect. I guess I'll just have to keep
> adding or subtracting small amounts of feedline to get it right?
>
> If so, are we talking inches or what? Any ideas appreciated.
>
> Larry VE7EA
>
> --
> **********
> to reply via email remove "fake"
>

2247. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 15:59:54 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ouijjFercl6U1@uni-berlin.de>
Source record: 90568

"Richard Clark" wrote>
> >Does the FCC (or anyone else) define any standard site for measurement of
> >antennas?
>
> Hi Ed,
>
> It is called in situ. A field survey is required in the process of
> licensing.

However the FCC does *not* require in situ measurements for the proof/operation of ANY transmit antenna used for FM or television broadcast -- whether required to be directional or not. If directional, the required pattern is defined in the license application/grant, and is demonstrated only via relative field measurements by the antenna OEM on his test range.

The reason is that the measured value on VHF/UHF can depend at least as much on the propagation paths to the measured points as the true radiation pattern from the antenna hardware itself.

In situ measurements are required for certain qualified bearings on the calculated radiation patterns of MW broadcast directional arrays, to ensure that co-channel interference is controlled. There really isn't another choice in this case -- the array is purpose-built on site. Erecting and testing it off site would not be practical, and the terrain likely would be different anyway. MW directional arrays also have means of adjusting the phase and power in each radiator to adjust the pattern values as shown needed by the monitoring point measurements.

RF

Visit http://rfry.org for FM broadcast RF system papers.

2248. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 16:15:30 UTC
From: Fred Hambrecht Sr - Gilbert News <w4jle@w4jle.com>
Message-ID: <CKoWc.6139$il.612@fe39.usenetserver.com>
Source record: 90570

The material in fillings has changed. One of the more prominent cases involved Lucille Ball during WW2. She had come from the dentist and picked up a radio It was traced to a Japanese gardner. He was sending ship movements back to Japan. He was arrested as a result. Or so the story goes, YMMV.

Back in the AM days, my wife came running into the shack yelling she could hear me on the stove. The old gas stove had carbon deposits that apparently actied like a rectifier when a pot was placed on the burner.

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0408200119.45d68e11@posting.google.com...
> In the 1920's and 1930's there were scores of people
> claiming to "hear radio in [their tooth cavity] fillings".
>
> Today, we have more people in more countries with more tooth fillings
> near more (and more powerful) transmitters than ever before, yet
> nobody claims to hear radio in their teeth. The focus has shifted to
> other, more fashionable sources of radiation, such as cellphones.
>
> It all boils down to whether low-level, non-ionizing radiation has any
> effect at the molecular level or not.
>
> Conventional wisdom had it that being that radiation non-ionizing, if
> its intensity was short of sufficient for inducing macroscopic
> heating, it would not be harmful. On the other hand, heating had long
> been tied to cataracts and male sterility, and of course to burns.
>
> In recent years, it was discovered that many birds had the capability
> to convert the earth magnetic field into electrochemical nerve
> signals. As microscopic magnetic crystals were found in birds' brains
> (and later in humans' brains as well), speculation is now focusing on
> the possibility that physical effects may have some heretofore
> unnnoticed chemical impact too.
>
> Bad statistical manipulation is easy to spot, bad data much less so.
> As an RF addict and a statistics aesthete, I hope research will
> continue, but I am not terribly concerned.

2249. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 16:15:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2q5ki0lkmjfec5ht1urjefa7n98bpa96u9@4ax.com>
Source record: 90569

On Mon, 23 Aug 2004 10:59:54 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>However the FCC does *not* require in situ measurements for the
>proof/operation of ANY transmit antenna used for FM or television
>broadcast --
ï¿½ does not clash with
>The reason is that the measured value on VHF/UHF can depend at least as much
>on the propagation paths
?

73's
Richard Clark, KB7QHC

2250. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 16:20:37 UTC
From: Fred Hambrecht Sr - Gilbert News <w4jle@w4jle.com>
Message-ID: <pPoWc.6146$il.3429@fe39.usenetserver.com>
Source record: 90421

Worked Berry Goldwater and Art Collins aboard Arts boat the SUNDANCE in the 60's while operating maritime mobile in the Pacific.

They said if I voted for Goldwater there would be 100,000 troops in Viet Nam. I did and sure enough there were.

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:oru5i09kctf0ln586mlkav60a0ti2rgm52@4ax.com...
> On Tue, 17 Aug 2004 22:13:18 -0400, "J. McLaughlin"
> <JCM@Power-Net.Net> wrote:
>
> >Possibly.
> >However, it seems that from about 1873 'till January 1, 1952 the rate
> >was one cent. 73 Mac N8TT
>
> Hi Mac,
>
> It must've been quite an expense initially, later a bargain.
>
> Let's see, all within reach I have some QSL cards from the mid 60's.
> One from WLW at 4 cents, WCBS for a nickel, One from K7UGA also a
> nickel and one from K4LIB, one from CBC for 3 cents Canadian, and a
> post card with several cancellations marked Hamburg, Innsbruck, and
> New York for One Cent (cancellations 1887) with an extra One Cent
> stamp (for international?).
>
> K7UGA would be livid with the crop of candy-ass, pansy republicans
> that inhabit the hill these days.
>
> 73's
> Richard Clark, KB7QHC

2251. Re: Adding/Splicing Ladder Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 16:27:32 UTC
From: jder8745@aol.com
Message-ID: <20040823122732.18077.00002234@mb-m03.aol.com>
Source record: 90422

Howdy,

Try split bolt connectors. When tightened sufficently they will provide good electrical and mechanical connection and strength.

Incidentally, split bolt connectors provide a good way to "tune" a wire antenna by varying its length.

73, Jack K9CUN

73 de Jack, K9CUN

2252. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 16:56:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r87ki01slubu0pd9c2hn9omb5cnuefr9ps@4ax.com>
Source record: 90423

On Mon, 23 Aug 2004 12:20:37 -0400, "Fred Hambrecht Sr - Gilbert News"
<w4jle@w4jle.com> wrote:

>They said if I voted for Goldwater there would be 100,000 troops in Viet
>Nam. I did and sure enough there were.

Hi Fred,

Pissed me off too. Now the situation is reversed. Too much ego and
not enough go from the republiwhiners. Barry had the courage of his
convictions - the current crop of effete mama's boys don't compare.

73's
Richard Clark, KB7QHC

2253. Noise and Loops Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 17:01:35 UTC
From: tangerame@earthlink.net
Message-ID: <ecb0f5f9.0408230901.652bebe3@posting.google.com>
Source record: 90424

This is more of an account than a question but here goes. I have a second
qth in the Sierra at about 4000 feet. The soil is rocky and dry,
especially this time of year. Using a G5RV at about 40 feet in a tree
I was plagued by a surprisingly high noise levelon 80/40 meters. It
sounded like power line noise but I can't say for sure. Playing with
various grounding schemes seemed to help somewhat but never really got
rid of the noise. One scheme seemed to work for awhile and the next
week it didn't.

The solution was to close in the bottom of the G5RV forming a full
wave loop.
The noise is no longer discernible. It went from approximately an s-6
to zero!

My question is: What can I conclude from this? Either concerning the
nature of the noise or the efficacy ofthe solution. Loops is gud?

Aside, the loop seems to be good close in as it is fed from the top
(Like a G5RV) but I am considering a corner feed to improve low angle.

Tony WA6LZH

2254. Re: Noise and Loops Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 18:30:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <umdki01f2hvhd6q7tesrpdrcf6vin58r00@4ax.com>
Source record: 90425

On 23 Aug 2004 10:01:35 -0700, tangerame@earthlink.net (Tony Angerame) wrote:

>The solution was to close in the bottom of the G5RV forming a full
>wave loop.
>The noise is no longer discernible. It went from approximately an s-6
>to zero!

Hi Tony,

If it is a crackling noise, it is most likely static. Are you using a BalUn with 0 Ohms continuity across the feedpoint? If not, add one, or add a small resistor (10KOhm) across the feedpoint to drain the charge and make sure your set is grounded (to as good a ground as you used as a remedy before).

73's
Richard Clark, KB7QHC

2255. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 18:31:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412a397d$1_4@corp.newsgroups.com>
Source record: 90427

Fred Hambrecht Sr - Gilbert News wrote:
> Back in the AM days, my wife came running into the shack yelling she could
> hear me on the stove. The old gas stove had carbon deposits that apparently
> actied like a rectifier when a pot was placed on the burner.

Back in the 50's, the local Assembly of God church installed
an audio amplifier. Many of the congregation said they could
hear the Voice Of God coming out of the amp when nobody
was speaking. Turned out, it was My voice. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2256. Re: MOSELY TA-33

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 18:34:36 UTC
From: tangerame@earthlink.net
Message-ID: <ecb0f5f9.0408231034.3766a542@posting.google.com>
Source record: 90426

I bought an unused TA-33 at a hamfest. The elements telescoped together with a dab of colored paint on each piece.

Tony WA6LZH

2257. Re: Noise and Loops Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 18:39:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412a3b63$1_4@corp.newsgroups.com>
Source record: 90429

Tony Angerame wrote:
> My question is: What can I conclude from this?

A 4:1 voltage balun will also solve the problem or
simply an RF choke across the dipole feedpoint. The
problem is static electricity common in dry climates,
building up between the two antenna conductors, and
can be caused by wind or snow. It is enough voltage
to cause arcing across the coax connector. (Hint: The
quad was invented to solve a Yagi melting problem.)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2258. Re: unable to tune doublet at higher freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 18:45:02 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <OWqWc.45812$Fg5.21092@attbi_s53>
Source record: 90428

Where is it fed? [center, end, off center, etc.]

If center fed, the impedance looking into the feedline exceeds the
tuning range of your tuner. I would start by adding a little less than
1/4 wavelength at 28.3 MHz of additional feedline [something around 6 feet].

I use a CF doublet with 600 Ohm tuned feeders and an OLD [OLD] Murch
UT2000A tuner with a very good balun.

+ + +

Larry Gagnon wrote:
> I have a 135' long doublet, 45' in the air fed with 450 ohm ladderline. It
> tunes fine and works well through an MFJ tuner on all bands up to 21MHz.
> Above 21MHz I have a very difficult time tuning the antenna to get any SWR
> below 3:1. I cut 6' off the feedline when it was finally dressed into my
> shack and that made it worse. I have now reinstalled the extra 6' and that
> is better for tuning, but not yet perfect. I guess I'll just have to keep
> adding or subtracting small amounts of feedline to get it right?
>
> If so, are we talking inches or what? Any ideas appreciated.
>
> Larry VE7EA
>

2259. Re: chain link fence

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 19:07:34 UTC
From: gmz79@aol.comnospam
Message-ID: <20040823150734.16070.00002777@mb-m21.aol.com>
Source record: 90430

Hmmm Sounds good , Put up a 1wl loop for 80 meters (274ft+/-)?
up 20 to 40 feet,feed it with ladder line or window line (61ft) into a
balanced tuner and rock and roll. Should be able to cover the entire
US on 40 and 80meters with some rather Brutal lobes on 20m.
You be Jammin!!!

I get consistent 9+5, 9+10 reports on 40m out 500miles with this setup on
10watts!!!!!! YMMV
73
greg
WG8Z

---
my back yard is fenced(102 ft by 35 ft. chain link woith dug in
posts every 7 or 8 ft
could this be used as a counterpoise or as a ground?
--
OK!
What GeNiuS pUt thE CaPlocK KEy
RiGhT NeXt to The Shft KEY?

Seek not to confound me as I am dim-witted and slow of study.

Wedge KC2MGJ

Greg Z
to thine own sound be true
WG8Z

2260. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 19:26:56 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <gfWdnWLWT4xA2bfcRVn-tw@comcast.com>
Source record: 90431

> The material in fillings has changed. One of the more prominent cases
> involved Lucille Ball during WW2. She had come from the dentist and picked
> up a radio It was traced to a Japanese gardner. He was sending ship
> movements back to Japan. He was arrested as a result. Or so the story
> goes,
> YMMV.

http://www.snopes.com/radiotv/tv/fillings.htm
http://www.cord.edu/dept/concord/issues/2003-11-07/opinions/cody.html
http://answers.google.com/answers/threadview?id=367925

--

KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

2261. Re: Is AM Radio Harmful?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 19:59:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ariki0dbckevv1380e9rvm3ojke7iid0pb@4ax.com>
Source record: 90432

On Mon, 23 Aug 2004 14:26:56 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>http://www.cord.edu/dept/concord/issues/2003-11-07/opinions/cody.html

When the nervous old maids of the neo-con persuasion look under their
beds for nightmares, they find towering villians:
>Lucille Ball was just one of many Hollywood elites that were unabashed Communists
We're lucky she passed on before GW had her shipped to Gitmo.

73's
Richard Clark, KB7QHC

2262. Re: Grounding Tower & Shack (Advice Needed)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 20:11:27 UTC
From: Micro MegaWatt <MMW@power.net>
Message-ID: <PbsWc.129693$sh.90822@fed1read06>
Source record: 90433
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna

All about grounding and lightning protection at PolyPhaser -- URL:
http://www.polyphaser.com/ppc_pen_home.asp

--
One Watt

To steal ideas from one person is plagiarism;
to steal from many is research.
-- Comedian Steven Wright

"Private" <radio-operator@telus.net> wrote in message
news:d318809e.0408081853.5e06781a@posting.google.com...
> Hello,
>
> I am looking for some advice on if the ground system featured below is
> sufficent or should be upgraded. It consists of:
>
> - 3 ground rods 10' each around the tower (bonded together)
> - 2 ground plates (one outside, one in the shack, also bonded
> together)
> - lightning arrestors and/or feedthrough adapters
> - tower to mast ground
> - interior coax switch (not shown)
>
> I provided some pictures below:
>
> http://www.telusplanet.net/~homac/exteriorground01.JPG
>
> http://www.telusplanet.net/~homac/exteriorground02.JPG
>
> http://www.telusplanet.net/~homac/exteriorground02a.JPG
>
> http://www.telusplanet.net/~homac/exteriorground03.JPG
>
> http://www.telusplanet.net/~homac/exteriorground04.JPG
>
> http://www.telusplanet.net/~homac/interiorground01.JPG
>
> http://www.telusplanet.net/~homac/interiorground02.JPG
>
> I am looking for constructive feedback.....
>
> Thank-you....
>

> Lloyd

2263. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 20:23:01 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <FmsWc.184656$wH4.12259186@twister.southeast.rr.com>
Source record: 90436

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040822232315.04872.00001748@mb-m12.aol.com...
> >
> >How is it I get the feeling they are not trying to develope the remotely
> >tunable antenna. Seem to me someone just wants to have the patent on the
> >idea
> >
>
> Huh?
> They developed it, making it and selling like a hotcakes. That's the idea,
to
> have a patent on the idea for terrific product!
>
> Yuri, K3BU
Really, didnt know the things were on the market.

2264. Re: Tuning Schumann coil?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 20:28:00 UTC
From: k7itm@aol.com
Message-ID: <3200347.0408231228.4f13c24a@posting.google.com>
Source record: 90434

Are you quite sure you have no way to measure inductance? Even if you have only an AC voltmeter and a signal generator and some capacitors, you should be able to measure the inductance. One of the best ways to "measure" it for your application is to try a capacitor and see what the resonant frequency actually is; then adjust the capacitor (by a factor equal to the square of the ratio of resonant and desired frequencies) and try again, repeating until it's trimmed to the desired resonance.

Cheers,
Tom

Tim Robbins <trobbins2002@artex.com> wrote in message news:<ckkji01aiqagf0fgqim1o377ebi1fuc69g@4ax.com>...
> I have a 300 long x 50mm dia. Schumann coil that measures 18.75KOhms.
> I have no way to measure inductance. It has an annealed steel core 1M
> long.
>
> What capacitor value do I need to tune it to an 8Hz center frequency?
>
> Thank you,
>
> Tim

2265. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 20:35:27 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <jysWc.184657$wH4.12263953@twister.southeast.rr.com>
Source record: 90438

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:a9rii0pc31ussctuet7l8rnd9b393i11vo@4ax.com...
> On Mon, 23 Aug 2004 03:01:53 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >I was under the impression that radiation efficency was pretty much a"
> >no-brainer".If the antenna is built of quality materials with good
> >workmanship the antenna would be an efficent radiator with little ohmic
or
> >dielectric losses. The exception to this of course would be antennas that
> >use an earth ground. I just found I was losing at least 3 db to heating
up
> >the ground.
>
> Hi Jimmie,
>
> 3dB heating up the ground with an antenna that has 5dBi gain in the
> preferred direction and launch angle compared to an antenna that has
> no ground and 0dBi gain in the same preferred direction and launch
> angle may give you pause and allow the worms some comfort on a cold
> day.
>
> Workmanship and quality materials tests those reputations vastly more
> for smaller antennas than standard sized ones. Those 1 meter loops
> used for HF are not rated for the lower bands for very good reasons,
> and they claim (and I believe them) high standards for their product.
> However, if you could resonate them in the 160M band, you'd be lucky
> to see 1% efficiency.
>
> Small antennas carry a lot of baggage, and any claims of efficiency
> superior to the standard antennas they replace are suspect. When they
> qualify that efficiency in creative terms like "more efficient per
> unit length" you would do well to skip that and ask for field
> strengths out 10 miles. A model called the eh had an FCC style site
> survey performed to which they crowed it proved their design was equal
> or better to a full size antenna. The data revealed results 10 and 20
> miles out were 15-17dB down below that same standard they were so much
> more efficient than.
>
> 73's
> Richard Clark, KB7QHC

Is this radiation efficency or gain, y'all are talking about. Not familar
with the DLM but sounds like the MFJ loop. 10 db pad and a cb antenna would

work as good.

2266. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 20:54:47 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <rQsWc.184660$wH4.12264417@twister.southeast.rr.com>
Source record: 90435

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040822232034.04872.00001747@mb-m12.aol.com...
> >
> >I was under the impression that radiation efficency was pretty much a"
> >no-brainer".If the antenna is built of quality materials with good
> >workmanship the antenna would be an efficent radiator with little ohmic
or
> >dielectric losses. The exception to this of course would be antennas that
> >use an earth ground. I just found I was losing at least 3 db to heating
up
> >the ground.
> >
> >Jimmie
> >
> >
> >
>
> Keep digging, you will find more lost dBs. Things get aggravated in loaded
> antennas when you start inserting coils, loading elements, folding them
back,
> etc. Efficiency is roughly proportional to the area under the current
> distribution curve along the radiator. That can be affected by any of the
> shortening "miraculous" gizmos, like Vincent DLM antenna. It is not just
heat
> loses in resistances. You can't have "perfectly" conducting piece of 1 ft
> copper tubing be as effcient as 130 ft full size radiator on 160m.
> Getting smarter, Eh ? :-)
>
> Yuri, K3BU
Yep, pretty much a "no brainer " the antenna you discribed is crap.

2267. Re: Tuning Schumann coil?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 21:09:35 UTC
From: jgboyles@aol.com
Message-ID: <20040823170935.24808.00001648@mb-m16.aol.com>
Source record: 90437

>I have no way to measure inductance.

To know what size Cap. you will need, you will have to have some idea of the inductance. One easy way to check the inductance uses an AC voltmeter a variable resistor (pot), and a low voltage 60 hz voltage source like a 120/12 volt transformer.
Hook the inductance and the variable resistor in series. Apply the 60 hz source across the series combination. Adjust the pot until the voltage dropped across the pot and the inductance are equal. Read the value of the pot, this is now equal to the inductive reactance of the coil Xl plus that 18k DC resistance you said you measured. From this you should be able to calculate the approximate inductance of the coil, and the Capacitor value needed to tune it to 8 hz.
Use L=(Xl+18k)/2*pi*60
and then 8^2=1/4*pi^2*L*C and solve for C.
73 Gary N4AST

2268. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 21:56:22 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040823175622.10713.00001713@mb-m13.aol.com>
Source record: 90439

> Can you describe what is on the label, with codes if any please?
>>
>> Thanks, Yuri
>
>Sure
>
>WA0GOZ S

You are right, I found it on the computer.Printed listings missed it, because I received your check on 89/06/06 after the regular 8905 issue was mailed, your payment arrived later, I sent you 8905 issue and it didn't show up on the printout. Searching computer I found it. I have mailed check with refund today. I am sorry for mixup, comments and above all, that I was not able to continue publishing and sinking money into Radiosporting. I am still hoping to scan old issues and perhaps continue with it on Internet (no money outlay for printing), but only as time permitting.

I am glad we could sort thing out.

73 Yuri

2269. Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:11:53 UTC
From: Dave <dave@somehere.net>
Message-ID: <olqki0pet45df00vbc4fltdqkhkeajmg5q@4ax.com>
Source record: 90440

I recently acquired a large quantity of very flexible stranded stainless steel wire at a garage sale. It is about 0.85 mm (around 1/32 inch) in diameter and extremely strong. I was wondering if this could be used for wire antennas for HF. I seem to remember seeing something about SS not being ideal. Is this a real consideration or just a matter of being too finiky?

Thanks - Dave

2270. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:15:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bpqki0lgfpd5to7rvarhhlnu37mo3vn2a5@4ax.com>
Source record: 90441

On Mon, 23 Aug 2004 20:35:27 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>Is this radiation efficency or gain, y'all are talking about.

The eh antenna (a Georgia special - y'all got the accent right).
>Not familar
>with the DLM but sounds like the MFJ loop.

More a fractal gone bad, if in fact that isn't repetitive.

>10 db pad and a cb antenna would
>work as good.

probably better - and be patented in the next year without disclosure
of your "prior art."

73's
Richard Clark, KB7QHC

2271. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:26:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2irki0h3pvrhjq4k5ft8qk2g2bub95m293@4ax.com>
Source record: 90442

On Mon, 23 Aug 2004 18:11:53 -0400, Dave <dave@somehere.net> wrote:
>just a matter of being too finiky?

Hi Dave,

Yes. No one is going to notice something less than half a dB (which
by definition is unnoticeable).

73's
Richard Clark, KB7QHC

2272. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:32:00 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040823183200.10713.00001720@mb-m13.aol.com>
Source record: 90443

>
>Hi Yuri,
>
>As Mac said, there are many "its" in the quote. However the vague
>combinations do not resolve to different interpretations as you
>persist. The extra wire leads to the same conclusion you BOTH
>describe and that is Beverage-like antenna characteristics. As that
>is a unique consequence of ground's retarding the wavefront, it
>necessarily follows that Tom maintains (and directly states) that the
>extra wire does NOT interfere with that action. He states why - tight
>coupling. He no where states that metallic copper assumes ohmic loss
>as the loss is a consequence of proximity to earth. Further, I've
>seen no statement from you or Tom that maintains the extra wire
>destroys the Beverage-like antenna characteristic, hence there is not
>a hair's width difference between you two.
>
>73's
>Richard Clark, KB7QHC

First of all, I have not done experiments to compare single wire Beverages vs. dual wire, with the other wire being laid underneath the Beverage.
I had the problem with statement "the wire below the Beverage is the wire couples to the lossy media below it so well it becomes very lossy" as far as I know wire maintains it's conductivity regardless where it is laid. Perhaps more accurate statement would be that wire laying on the ground becomes less significant in its contribution to the performance of the above Beverage.
But because the "ground" wire is connected typically at the termination point and at the feedpoint to the Beverage system, I am not sure that it can be "ignored". Some claim this forms the "open wire" parallel system and has significant effect on the Beverage performance. There is dispute as far signal arrival angles are concerned, some signals get subjected to wave tilt due to poor ground, some signals have their own tilt due to propagation and terrain effects.
To find out the reality, the exact systems should be compared in various situations. Modeling might not provide fool proof answers due to some programs having hard time to model reality, that can be confused by varying ground characteristics along the Beverage.

Yuri, K3BU

2273. Re: unable to tune doublet at higher freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:32:11 UTC
From: jgboyles@aol.com
Message-ID: <20040823183211.24808.00001653@mb-m16.aol.com>
Source record: 90444

>Above 21MHz I have a very difficult time tuning the antenna to get any SWR
>below 3:1.

Hi Larry, My good friend Reg Edwards pointed out some time ago that most antenna tuners give it up above 21 MHZ. This is due to stray Inductance and Capacitance in the Garden Variety Antenna Tuner. Makes it real difficult to tune certain antennas above 21 MHZ. As others have mentioned, change antenna length, or feed length and see what that does. There are programs that will determine correct tuner settings for a given impedance, I prefer the Smith Chart.
If you can determine the Impedance, R+/-jx of the feed point, there are a number of alternative ways of designing a matching network.
73 Gary N4AST

2274. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:36:10 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040823183610.06859.00003539@mb-m13.aol.com>
Source record: 90445

>
>I recently acquired a large quantity of very flexible stranded
>stainless steel wire at a garage sale. It is about 0.85 mm (around
>1/32 inch) in diameter and extremely strong. I was wondering if this
>could be used for wire antennas for HF. I seem to remember seeing
>something about SS not being ideal. Is this a real consideration or
>just a matter of being too finiky?
>
>Thanks - Dave
>

The best use of it would be for the Beverage receiving antennas. Extra resistance helps to retard the reflected wave and "sharpens" the pattern.

Otherwise it would beat the heck out of DLM, EH, CFA or Fractuled antennas.

Yuri, K3BU

2275. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 22:59:07 UTC
From: jgboyles@aol.com
Message-ID: <20040823185907.29625.00003386@mb-m16.aol.com>
Source record: 90446

>I recently acquired a large quantity of very flexible stranded
>stainless steel wire at a garage sale.
> was wondering if this
>could be used for wire antennas for HF.

Of course it could be used. The resistance loss is insignificant. It will actually increase your SWR bandwidth. Certain Comercial Ham antennas use a fixed resistor to improve bandwidth and lower SWR. So go for it and see what happens.

73 Gary N4AST

2276. Re: Tuning Schumann coil?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:21:31 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <OomdnQL_GpFs5rfcRVn-sw@comcast.com>
Source record: 90447

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040823170935.24808.00001648@mb-m16.aol.com...
> >I have no way to measure inductance.
>
> To know what size Cap. you will need, you will have to have some idea of
the
> inductance. One easy way to check the inductance uses an AC voltmeter a
> variable resistor (pot), and a low voltage 60 hz voltage source like a
120/12
> volt transformer.
> Hook the inductance and the variable resistor in series. Apply the 60
hz
> source across the series combination. Adjust the pot until the voltage
dropped
> across the pot and the inductance are equal. Read the value of the pot,
this
> is now equal to the inductive reactance of the coil Xl plus that 18k DC
> resistance you said you measured. From this you should be able to
calculate
> the approximate inductance of the coil, and the Capacitor value needed to
tune
> it to 8 hz.
> Use L=(Xl+18k)/2*pi*60
> and then 8^2=1/4*pi^2*L*C and solve for C.
> 73 Gary N4AST

Gary,
This sounds like a good idea. Only thing I would worry about is that given
the dimensions of the coil, it may be resonant below 60 Hz.

Tam/WB2TT

2277. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:41:40 UTC
From: "aunwin@insightbb.com"
Message-ID: <UgvWc.57552$mD.24636@attbi_s02>
Source record: 90448

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040823183200.10713.00001720@mb-m13.aol.com...
> >
> >Hi Yuri,
> >
snipirst of all, I have not done experiments to compare single wire
Beverages vs.
> dual wire, with the other wire being laid underneath the Beverage.
> I had the problem with statement "the wire below the Beverage is the wire
> couples to the lossy media below it so well it becomes very
> lossy" as far as I know wire maintains it's conductivity regardless where
it is
> laid.

Yuri
Wire conductivity may not be pertinent in this case as "coupling" can reduce
the applied current
I would be extremely surprised if Tom inferred that wire conductivity
changed.
Regards

Art

Perhaps more accurate statement would be that wire laying on the ground
> becomes less significant in its contribution to the performance of the
above
> Beverage.
> But because the "ground" wire is connected typically at the termination
point
> and at the feedpoint to the Beverage system, I am not sure that it can be
> "ignored". Some claim this forms the "open wire" parallel system and has
> significant effect on the Beverage performance. There is dispute as far
signal
> arrival angles are concerned, some signals get subjected to wave tilt due
to
> poor ground, some signals have their own tilt due to propagation and
terrain
> effects.
> To find out the reality, the exact systems should be compared in various
> situations. Modeling might not provide fool proof answers due to some
programs
> having hard time to model reality, that can be confused by varying ground
> characteristics along the Beverage.
>
> Yuri, K3BU

2278. Re: Tuning Schumann coil?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:44:32 UTC
From: jgboyles@aol.com
Message-ID: <20040823194432.29625.00003387@mb-m16.aol.com>
Source record: 90449

>This sounds like a good idea. Only thing I would worry about is that given
>the dimensions of the coil, it may be resonant below 60 Hz.

Hi Tam, Well, guess you are right, the self resonant frequency of the coil may be below 60 hz and would make the measurements different, this compounds his problem.
73 Gary N4AST

2279. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:48:56 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <EnvWc.50269$n7.10170@fe37.usenetserver.com>
Source record: 90450

OK, I've seen the responses that the G5RV ,and especially the Jr. variety, are below average performers. And that a center fed doublet with open line or at least something like 450 ohm ladder line is a better option as long as you have a balanced to unbalanced external tuner. I certainly won't argue that, but suppose I want to be able to use my Kenwood TS450sat's internal tuner (unbalanced input only), what are my options for a decent, simple multiband antenna (80/75,40,20,17,etc)? And, I understand that 'fan' dipoles can be effective (I have an Alpha Delta DXEE for 40/20/15/10, it's poor on 40 BTW). I don't have enough tress for multi element dipole anyway. Can a 'doublet' with 450 ohm ladder line to a 4:1 balun then coax to the tuner be effective? What would be 'ideal' dimensions for the doublet?
BTW, I did download the 'dipole3' program and my friend with the G5RV Jr. was VERY disappointed to learn that his Jr. wasn't worth a hoot, even though he has had fair success with it. Guess in the end it all comes down to what you have faith in :+)) . Nice little program, thanks for pointing me at it.

Fun to consider these things and ALWAYS to experiment. Cecil, I took to heart your 'l-loop' and modified one for 30 meters. I have had GREAT luck with it! Best thing I've tried on 30. Thanks!

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4128f8381'$1_8@corp.newsgroups.com...
> Jim Leder wrote:
>
>> I can read all kinds of info about the 'full sized' G5RV, but I have yet
>> to find any detailed performance info on the G5RV Jr.
>>
>> Like:
>> - The original G5RV was designed mainly for 20 meters, with acceptable
>> performance on 80/40 and if you are lucky maybe 17. What might be the
>> optimum band for the Jr., if it has one?
>
> Antennas are scalable with frequency. The full-sized G5RV is a
> pretty good performer on 80m, 40m, and 20m (also 12m). The 1/2
> sized G5RV will therefore be a pretty good performer on 40m,
> 20m, and 10m.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2280. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:51:51 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <412a8085.384175828@news.galilei.com>
Source record: 90451

Hi Phil

I guess I was one of the few that didn't have any problems with 17 tuning up either before or after the 160 coil. But if I recall, I have it scrunched up real tight too. Like I said, been awhile, but I hope to be back at it again before winter sets in. I just moved to a new house in a new state and know I'll have to retune that thing after moving it.

Good Luck with it!

TTUL
Gary

2281. loop/dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:57:23 UTC
From: "aunwin@insightbb.com"
Message-ID: <DvvWc.304947$%_6.92570@attbi_s01>
Source record: 90452

Following on the subject of coil loads on radiators I saw a mobile end fed dipole with a single loop at the center (cell?) It occured to be that the loop contained a capacitance of value dependent on the "pitch" of the loop as the loop was not "closed"
Does anybody know what the addition of the loop was for (phase change?) and its radiation addition to the dipole?
Note that the addition of another coil to the loop would change the impedance immensely. does the said loop encourage perpetual motion that Roy talked about?
Regards
Art

2282. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-23 23:58:50 UTC
From: uce@ftc.gov
Message-ID: <irOdnduO4t8nGbfcRVn-gg@comcast.com>
Source record: 90453

Ok Gary, thanks for the info. I may get ambitious enough to retune the thing using the right equipment. So far I have just used the exciter output. I suppose realistically speaking, 17 through 10 will not matter much in the next few years. The thing is impressive on 160, though, and that was the main idea.

73,

Phil - N1KI

In article <412a8085.384175828@news.galilei.com>, raiar@slacc.com.nospam wrote:
>Hi Phil
>
>I guess I was one of the few that didn't have any problems with 17
>tuning up either before or after the 160 coil. But if I recall, I
>have it scrunched up real tight too. Like I said, been awhile, but I
>hope to be back at it again before winter sets in. I just moved to a
>new house in a new state and know I'll have to retune that thing after
>moving it.
>
>Good Luck with it!
>
>TTUL
>Gary
>

Anti-spam measure to direct unwanted e-mail
to the FTC's unsolicited commercial e-mail address.

For direct reply, use my callsign in arrl.net
format or look me up on qrz.com

2283. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 00:07:23 UTC
From: k9sqg@aol.com
Message-ID: <20040823200723.10796.00001696@mb-m13.aol.com>
Source record: 90454

It will be strong but the trade-off is the higher resistance/loss.

2284. Re: chain link fence

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 00:09:56 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <rh1li01d9l0li279ejtc291d31p99j22e6@4ax.com>
Source record: 90455

On 23 Aug 2004 19:07:34 GMT, gmz79@aol.comnospam (greg z) wrote:

>Hmmm Sounds good , Put up a 1wl loop for 80 meters (274ft+/-)?
> up 20 to 40 feet,feed it with ladder line or window line (61ft) into a
>balanced tuner and rock and roll. Should be able to cover the entire
>US on 40 and 80meters with some rather Brutal lobes on 20m.
> You be Jammin!!!
>
Careful with CL fence. It may work, but older fence may turn out to
be hundreds or thousands of tiny diodes at the points of contact where
the fence is woven..

When we had the repeater here I found a 10" piece of wire laying
against a guy wire created enough noise to drowned out a 50 watt
mobile less than 5 miles away.

I could do the same with a 10" screw driver by just sliding it up and
down the guy. The end of that guy was grounded' too.

OTOH you are rarely listening while transmitting on HF so the noise
probably wouldn't bother on receive (unless your neighbor is trying to
listen to the AM broadcast band<G>)

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

> I get consistent 9+5, 9+10 reports on 40m out 500miles with this setup on
>10watts!!!!!! YMMV
> 73
> greg
> WG8Z
>
>
>
>--
>------
>my back yard is fenced(102 ft by 35 ft. chain link woith dug in
>posts every 7 or 8 ft
>could this be used as a counterpoise or as a ground?

2285. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 00:20:20 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <8RvWc.550$%11.374@trnddc02>
Source record: 90456

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040822232034.04872.00001747@mb-m12.aol.com...
> >
> >I was under the impression that radiation efficency was pretty much a"
> >no-brainer".If the antenna is built of quality materials with good
> >workmanship the antenna would be an efficent radiator with little ohmic
or
> >dielectric losses. The exception to this of course would be antennas that
> >use an earth ground. I just found I was losing at least 3 db to heating
up
> >the ground.
> >
> >Jimmie
> >
> >
> >
>
> Keep digging, you will find more lost dBs. Things get aggravated in loaded
> antennas when you start inserting coils, loading elements, folding them
back,
> etc. Efficiency is roughly proportional to the area under the current
> distribution curve along the radiator. That can be affected by any of the
> shortening "miraculous" gizmos, like Vincent DLM antenna. It is not just
heat
> loses in resistances. You can't have "perfectly" conducting piece of 1 ft
> copper tubing be as effcient as 130 ft full size radiator on 160m.
> Getting smarter, Eh ? :-)
>
> Yuri, K3BU

Yuri

I wonder where the power into a perfectly conducting 1 foot length of
copper tubing goes if it doesnt get either radiated or get converted to
heat. Can you tell me how the short (1 foot) copper tube looses the power
it receives from its power source?

Jerry

2286. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 00:31:51 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10il33m2mvrjn70@corp.supernews.com>
Source record: 90457

www.steppir.com

Alan NV8A

On 08/23/04 04:23 pm Jimmie put fingers to keyboard and launched the
following message into cyberspace:

>>>How is it I get the feeling they are not trying to develope the remotely
>>>tunable antenna. Seem to me someone just wants to have the patent on the
>>>idea

>>Huh?
>>They developed it, making it and selling like a hotcakes. That's the idea,
>
> to
>
>>have a patent on the idea for terrific product!

> Really, didnt know the things were on the market.

2287. Re: unable to tune doublet at higher freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 00:45:39 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10il3vkkikoed75@corp.supernews.com>
Source record: 90458

Larry
Add 3 feet of wire to one end of the doublet and see what happens.
H.

"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:hjoWc.31359$9Y6.9848@newsread1.news.pas.earthlink.net...
> Larry
> You're trying to feed the antenna at a current node.
> Change the length of the antenna, not the feed.
> Try asymmetric legs.
> 73
> H.
> NQ5H
>
> "Larry Gagnon" <lagagnon@fakeuniserve.com> wrote in message
> news:pan.2004.08.23.14.05.12.862857@fakeuniserve.com...
> > I have a 135' long doublet, 45' in the air fed with 450 ohm ladderline.
It
> > tunes fine and works well through an MFJ tuner on all bands up to 21MHz.
> > Above 21MHz I have a very difficult time tuning the antenna to get any
SWR
> > below 3:1. I cut 6' off the feedline when it was finally dressed into my
> > shack and that made it worse. I have now reinstalled the extra 6' and
that
> > is better for tuning, but not yet perfect. I guess I'll just have to
keep
> > adding or subtracting small amounts of feedline to get it right?
> >
> > If so, are we talking inches or what? Any ideas appreciated.
> >
> > Larry VE7EA
> >
> > --
> > ********************************
> > to reply via email remove "fake"
> >
>
>

2288. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 00:54:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tp1li0drebgt0oig3bs691tjprtade0v8g@4ax.com>
Source record: 90459

On 23 Aug 2004 22:32:00 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:
>I had the problem with statement "the wire below the Beverage is the wire
>couples to the lossy media below it so well it becomes very
>lossy" as far as I know wire maintains it's conductivity regardless where it is
>laid.

Hi Yuri,

In fact, no one has said otherwise. It follows of common sense unless
ground were exceptionally conductive such that its magnetic field were
to compress the skin-effect layer of the wire. If that were so, it
would be a new world for us all.

>Perhaps more accurate statement would be that wire laying on the ground
>becomes less significant in its contribution to the performance of the above
>Beverage.

Quite so - if demonstrable.

>To find out the reality, the exact systems should be compared in various
>situations. Modeling might not provide fool proof answers due to some programs
>having hard time to model reality, that can be confused by varying ground
>characteristics along the Beverage.

C'mon now, with only two or three wires involved? The only problem
modeling programs have difficulty with are with modelers.

I compared two such designs. Nothing very involved with a 3M high
100M long Beverage operating in the 80M band (perhaps not long enough,
I will let others do their best if they find fault). I then compared
it with another which had a wire running below it 1cM above ground
level. The two showed more than 8dB difference with the ground wire
model clearly lossier (EZNEC declared at that same 8dB).

Now, I know that such antennas are not designed to be transmit
antennas (and again, perhaps too short to boot); so I will leave that
to others to engage as a receive antenna if they doubt reciprocity (or
I will do that later this eve for them as I often have to).

Yuri, the problem with you arguing Tom's position is that nothing is
said of this glaring difference. It is quite remarkable (or I made
some remarkable mistake or the wire is just too short as I mentioned)
and it DOES denote a dramatic departure from accepted Beverage
characteristics which has been undisclosed as a comment from Tom, if
in fact he offered it. This 8dB loss does make sense in that you have
a leaky transmission line in a death embrace with ground. The wires

would split the power and the lower power contribution would certainly attempt to warm the worms with more gusto.
[IF perhaps we were to employ the old twinlead twist every foot or so, we might find things evened out ;-)]

I will let that simmer for this evening.

73's
Richard Clark, KB7QHC

2289. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 01:05:23 UTC
From: murgatroid <pokimensroom@invalid.com>
Message-ID: <2ovii6Ff662tU1@uni-berlin.de>
Source record: 90460

Oly thing I don't like about the stuff is that it can cut you, if too small.
Copper just breaks.

2290. Re: T2FD: keeping the spreaders in place

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 01:25:53 UTC
From: Yodar <yodar@cfl.rr.com>
Message-ID: <BOwWc.44553$4s6.40458@tornado.tampabay.rr.com>
Source record: 90461

Shoe Goo or Plumbers GOOP (RUBBER in a tube cures oernight)

Strong and weather resistant- UV resistant vars : MARINE GOOP

yodar

SpamHog wrote:
> On my T2FD I used 1/2" electrical plastic pipe for spreaders.
>
> The wire is rather thick: 4 mm^2 conductor section, stranded,
> PVC-insulated.
>
> How do you suggest to keep the spreaders in place?
>
> tnx es 73 de n1jpr/i2
> http://filippo.ru.ru

2291. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 01:26:20 UTC
From: "aunwin@insightbb.com"
Message-ID: <MOwWc.78339$TI1.49444@attbi_s52>
Source record: 90462

There are other remote control antennas that have been patented. In fact there is a patent already in the mix that uses exactly the same method as the STEPPER that was printed in RADCOM several years ago.What exactly did the new patent claim?
Art
"Minnie Bannister" <GoonButNotForgotten@NottheBBC.org> wrote in message news:10il33m2mvrjn70@corp.supernews.com...
> www.steppir.com
>
> Alan NV8A
>
>
> On 08/23/04 04:23 pm Jimmie put fingers to keyboard and launched the
> following message into cyberspace:
>
> >>>How is it I get the feeling they are not trying to develope the remotely
> >>>tunable antenna. Seem to me someone just wants to have the patent on the
> >>>idea
>
> >>Huh?
> >>They developed it, making it and selling like a hotcakes. That's the idea,
> >
> > to
> >
> >>have a patent on the idea for terrific product!
>
> > Really, didnt know the things were on the market.

2292. Colorado

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 02:50:07 UTC
From: Popcorn Lover <popcorn@N0T-SPAM.COM>
Message-ID: <Xns954ED407F8F08popcornN0TSPAMCOM@206.124.0.13>
Source record: 90463

http://groups.yahoo.com/group/CO-Amateur-Radio/

--
- Popcorn Lover
If you love popcorn too, there are no popcorn groups on usenet but
there IS one in Yahoo Groups:
http://groups.yahoo.com/group/Popcorn_Lovers
The internet's first-ever-in-the-world popcorn group!
Share the word on making great popcorn - come join us!

2293. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 04:20:39 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <amzWc.21187$%n4.17266@bignews6.bellsouth.net>
Source record: 90464

The best thing about it is - you already have it. Use it.

"Dave" <dave@somehere.net> wrote in message
news:olqki0pet45df00vbc4fltdqkhkeajmg5q@4ax.com...
> I recently acquired a large quantity of very flexible stranded
> stainless steel wire at a garage sale. It is about 0.85 mm (around
> 1/32 inch) in diameter and extremely strong. I was wondering if this
> could be used for wire antennas for HF. I seem to remember seeing
> something about SS not being ideal. Is this a real consideration or
> just a matter of being too finiky?
>
> Thanks - Dave

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004

2294. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 04:24:26 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412ac469_7@corp.newsgroups.com>
Source record: 90465

Jim Leder wrote:
> Fun to consider these things and ALWAYS to experiment. Cecil, I took to
> heart your 'l-loop' and modified one for 30 meters. I have had GREAT luck
> with it! Best thing I've tried on 30. Thanks!

For anyone who missed it, here is my previous posting on how to
optimize a full-sized G5RV for each HF band by changing the
length of the "matching section" per band.

These are actual measured values for the resonant lengths of the
series section transformer for all HF bands for my optimized G5RV.

102' dipole, insulated wire. Ladder-line is approximately Z0=380
ohms, VF = 0.9. Coax is RG-213

Freq-MHz ladder-line length
3.8 23 ft. (best with 1000pf in parallel)
7.2 35 ft.
10.125 20 ft.
14.2 29 ft.
18.14 36 ft.
21.3 27 ft.
24.95 29 ft.
28.4 38 ft.
--
73, Cecil http://www.qsl.net/w5dxp

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2295. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 06:56:29 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <m0nli0lpro7m6ca40afb9o64131skt4osh@4ax.com>
Source record: 90466

On Mon, 23 Aug 2004 22:26:34 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Yes. No one is going to notice something less than half a dB (which
>by definition is unnoticeable).

This may be true for upper HF, but for MF/low-HF dipoles the situation may be a bit different. The dipole length is inversely proportional to frequency and the skin depth (and hence AC resistivity) is directly proportional to the square root of frequency. Thus the net effect is that the total dipole resistance is inversely proportional to the square root of the frequency. Thus a dipole cut for the lower band has a larger resistance than an antenna cut for a higher bands, provided that the same wire type is used.

The resistivity and skin depth depends on the material and apparently varies quite a lot depending of the type of stainless steel, since various sources give quite different values.

The skin depth for copper at 1.8 MHz is about 50 um, while for some stainless steel, it appears to be around 200 um. Both values are well below the OP's 850 um conductor diameter.

One source claimed that the stainless steel has a 52 times DC resistivity compared to copper, so factoring in the large skin depth, the AC resistivity at 1.8 MHz would be more than 12 times that of the copper wire of the same size.

An other source specified the stainless steel resistivity as 43E-8 ohm/m and while the 0.85 um diameter conductor with 0.2 mm skin depth would have an effective cross section of 0.4 mm2 and with the 80 m length of the 1.8 MHz dipole, the total resistance would be 86 ohms.

Compare this to the nominal 73 ohm radiation resistances for a half wave dipole and more than half of the transmitter power would be dissipated in the losses.

However, since the current distribution is not uniform along the dipole, the effective losses are not that quite as bad. On the other hand, if the dipole is close to the ground, the radiation resistance is well below 73 ohms, so again, we are in the -3 dB efficiency ballpark value.

With a 1500 W transmitter, the losses are about 1 W/m, this should help melting any frost accumulated on the wire during a cold night:-).

Now the question is, is this 80 m stainless steel strong enough to support itself, even if supported in the middle at the feed point.

For a copper wire with the same diameter, the resistance would have been below 10 ohms and the losses about 0.5 dB.

Paul OH3LWR

2296. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 07:09:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kupli0dbp1qtddvaqfsn92fdgso7tmiaja@4ax.com>
Source record: 90467

On Tue, 24 Aug 2004 09:56:29 +0300, Paul Keinanen <keinanen@sci.fi>
wrote:

>Compare this to the nominal 73 ohm radiation resistances for a half
>wave dipole and more than half of the transmitter power would be
>dissipated in the losses.

Hi Paul,

And still, no one would notice. In fact, I gave the loss 100 Xs
copper, lowered the frequency to 1MHz and saw roughly 6dB loss - the
"standard" S-Unit, against which propagation variations would toss
that around to wider variation. I suppose it wouldn't do for EME, but
I don't know any work at 1MHz for EME.

Still, and all, this determination is easily within the scope of the
free distribution of EZNEC which allows any user to make an informed
decision about a choice being OK.

73's
Richard Clark, KB7QHC

2297. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 07:52:39 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <cnsli09la5l1953so579atf3s44jaq0b00@4ax.com>
Source record: 90468

On Tue, 24 Aug 2004 09:56:29 +0300, Paul Keinanen <keinanen@sci.fi>
wrote:

Two corrections:

>An other source specified the stainless steel resistivity as 43E-8
>ohm/m

The unit of resistivity is of course ohm m (not ohm/m).

>With a 1500 W transmitter, the losses are about 1 W/m, this should
>help melting any frost accumulated on the wire during a cold night:-).

With 50 % efficiency (-3 dBd gain), the losses are about 800 W and
when divided evenly along 80 m will give 10 W/m (not 1 W/m), which in
addition to frost will also melt ice and keep the birds away :-).

Paul OH3LWR

2298. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 10:28:46 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <sLEWc.20311$L94.12766@fed1read07>
Source record: 90469

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:8RvWc.550$%11.374@trnddc02...
>
> "Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
> news:20040822232034.04872.00001747@mb-m12.aol.com...
> > >
> > >I was under the impression that radiation efficency was pretty much a"
> > >no-brainer".If the antenna is built of quality materials with good
> > >workmanship the antenna would be an efficent radiator with little ohmic
> or
> > >dielectric losses. The exception to this of course would be antennas
that
> > >use an earth ground. I just found I was losing at least 3 db to heating
> up
> > >the ground.
> > >
> > >Jimmie
> > >
> > >
> > >
> >
> > Keep digging, you will find more lost dBs. Things get aggravated in
loaded
> > antennas when you start inserting coils, loading elements, folding them
> back,
> > etc. Efficiency is roughly proportional to the area under the current
> > distribution curve along the radiator. That can be affected by any of
the
> > shortening "miraculous" gizmos, like Vincent DLM antenna. It is not just
> heat
> > loses in resistances. You can't have "perfectly" conducting piece of 1
ft
> > copper tubing be as effcient as 130 ft full size radiator on 160m.
> > Getting smarter, Eh ? :-)
> >
> > Yuri, K3BU
>
> Yuri
>
> I wonder where the power into a perfectly conducting 1 foot length of
> copper tubing goes if it doesnt get either radiated or get converted to
> heat. Can you tell me how the short (1 foot) copper tube looses the power
> it receives from its power source?
>

> Jerry
>

This isn't answering your question, but you forgot the effect of reflected power. I wouldn't call that "lost power", but it sure isn't contributing to the radiation.

Ed
wb6wsn

2299. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 10:43:21 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <CYOdnRVUNv5WhrbcRVn-ow@gwi.net>
Source record: 90470

Jim Leder wrote:

> OK, I've seen the responses that the G5RV ,and especially the Jr. variety,
> are below average performers. And that a center fed doublet with open line
> or at least something like 450 ohm ladder line is a better option as long as
> you have a balanced to unbalanced external tuner. I certainly won't argue
> that, but suppose I want to be able to use my Kenwood TS450sat's internal
> tuner (unbalanced input only), what are my options for a decent, simple
> multiband antenna (80/75,40,20,17,etc)? And, I understand that 'fan' dipoles
> can be effective (I have an Alpha Delta DXEE for 40/20/15/10, it's poor on
> 40 BTW). I don't have enough tress for multi element dipole anyway. Can a
> 'doublet' with 450 ohm ladder line to a 4:1 balun then coax to the tuner be
> effective? What would be 'ideal' dimensions for the doublet?
> BTW, I did download the 'dipole3' program and my friend with the G5RV Jr.
> was VERY disappointed to learn that his Jr. wasn't worth a hoot, even though
> he has had fair success with it. Guess in the end it all comes down to what
> you have faith in :+)) . Nice little program, thanks for pointing me at it.
>
> Fun to consider these things and ALWAYS to experiment. Cecil, I took to
> heart your 'l-loop' and modified one for 30 meters. I have had GREAT luck
> with it! Best thing I've tried on 30. Thanks!
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4128f838l'$1_8@corp.newsgroups.com...
>
>>Jim Leder wrote:
>>
>>
>>>I can read all kinds of info about the 'full sized' G5RV, but I have yet
>>>to find any detailed performance info on the G5RV Jr.
>>>
>>>Like:
>>>- The original G5RV was designed mainly for 20 meters, with acceptable
>>>performance on 80/40 and if you are lucky maybe 17. What might be the
>>>optimum band for the Jr., if it has one?
>>
>>Antennas are scalable with frequency. The full-sized G5RV is a
>>pretty good performer on 80m, 40m, and 20m (also 12m). The 1/2
>>sized G5RV will therefore be a pretty good performer on 40m,
>>20m, and 10m.
>>--
>>73, Cecil http://www.qsl.net/w5dxp
>>
>>

>>
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>>http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>>------== Over 100,000 Newsgroups - 19 Different Servers! =-----
>
>
>
>
Hi Jim:

Here's what I've done in the past and it worked well for me. (though I'm not sure about the tuner in the 450, but it worked fine with my LDG Z100 auto tuner) Run the best coax you can find.. try to keep it as short as possible (less than 10' would be good) to the outside of the building then use a 1:1 Choke balun and convert to open wire (ladder line) run it to the center of the dipole. then get on the air and use it, think you'll be happy.

73 Dave Kc1di

2300. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 10:49:20 UTC
From: nana <nana@netscape.net>
Message-ID: <2p0kpkFfkm4oU1@uni-berlin.de>
Source record: 90471

That's what they use for mainstay antennas on yachts. they work well (the groundplane helps of course).

Brad VK2QQ

"Dave" <dave@somehere.net> wrote in message news:olqki0pet45df00vbc4fltdqkhkeajmg5q@4ax.com...
> I recently acquired a large quantity of very flexible stranded
> stainless steel wire at a garage sale. It is about 0.85 mm (around
> 1/32 inch) in diameter and extremely strong. I was wondering if this
> could be used for wire antennas for HF. I seem to remember seeing
> something about SS not being ideal. Is this a real consideration or
> just a matter of being too finiky?
>
> Thanks - Dave

2301. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 11:22:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412b2656$1_7@corp.newsgroups.com>
Source record: 90472

Ed Price wrote:
> This isn't answering your question, but you forgot the effect of reflected
> power. I wouldn't call that "lost power", but it sure isn't contributing to
> the radiation.

Remember, a terminated Rhombic radiates essentially
in one direction. Removing the termination allows
reflections to take place thus also radiating in the
opposite direction, the direct result of radiation of
reflected power.
--
73, Cecil http://www.qsl.net/w5dxp

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2302. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 11:29:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412b2807$1_7@corp.newsgroups.com>
Source record: 90473

KC1DI wrote:
> Here's what I've done in the past and it worked well for me. (though I'm
> not sure about the tuner in the 450, but it worked fine with my LDG
> Z100 auto tuner) Run the best coax you can find.. try to keep it as
> short as possible (less than 10' would be good) to the outside of the
> building then use a 1:1 Choke balun and convert to open wire (ladder
> line) run it to the center of the dipole. then get on the air and use
> it, think you'll be happy.

Of course, depending upon the impedance seen by the choke, the
choking function may be virtually non-existent. For instance,
5000 ohms is not an unusual impedance in a system of this sort.
The choke would need about 25,000 ohms of choking impedance. I
don't know where to obtain such a choke. I'm doing good to get
500 ohms of choking impedance. If I ran a system such as above,
I would definitely use a balanced antenna tuner.
--
73, Cecil http://www.qsl.net/w5dxp

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2303. Re: Preferred antenna location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 11:59:51 UTC
From: rc <rc@roncrowley.dot.com>
Message-ID: <iu8mi0hscqqt5s0qtt9g7rlgjho35vrpn4@4ax.com>
Source record: 90474

On Sat, 21 Aug 2004 17:38:42 GMT, Ron <rmrippy@hotmail.com> wrote:

>Other than locating an antenna as high as posible and in open space, are there
>"sweet spots" that behave like funnels for radio waves? By moving a portable
>receiver around to find the strongest signal, I have noticed that certain
>locations (I'm talking feet and yards, not miles) produce much more signal
>strength than others. Of course, I also end up moving the antenna angle too
>which may be responsible for this behavior. Just wondering if this effect is
>worth considering when installing an antenna. Or am I just finding the
>strongest lobe of the antenna pattern?
>
>Ron, W4TQT

There absolutely are "sweet spots", but how do you find them?

I think the most fun working with antennas is the unknown. After all
the formulas and calculations, the tuning, the trimming and tweaking,
etc., the element of chance enters the picture, where you put the damn
thing :-)

It's like flipping a coin, I guess.

Ron, W1WBV

2304. Beverage Antenna Used in WW2 (0/1)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 12:25:45 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <dnbmi01ae9bsugba7snumgtrk8mub7ub5t@4ax.com>
Source record: 90475

Hi All,

I have some info on a Beverage antenna that I believe you'll find interesting.

During 1942-43 I was with the Radio Intelligence Division of the FCC in Hawaii, monitoring enemy transmissions. One assignment by the State Department was to determine whether the Japanese in Japan were getting the same information from their local broadcasts as the propaganda broadcast on HF, or different information concerning the progress of the War.

On searching the AM broadcast band for Japanese stations we found JOAK, Tokyo, on 650 kHz, with an exceptionally strong nighttime signal. However, KNX, Los Angeles, also on 650, was equally strong, making copy of JOAK impossible. Consequently, two of my colleagues, Prose Walker, W4BW, and Edwin Rudisuhle, K6SAC, installed a Beverage antenna on the northern shore of Oahu to reduce the interference from KNX. The Beverage was more than one-half mile long at a height of 10 feet, aimed directly at Tokyo, and terminated with a variable resistor. The signal from KNX was totally nulled out with the adjustment of the terminating resistor.

The State Department was pleased with the results, because we were then able to record the JOAK broadcasts daily, with the records sent to Washington daily by US Army planes from Hickam Field, Honolulu.

Walt, W2DU

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The State Department was pleased with the results, because we were then able to record the JOAK broadcasts daily, with the records sent to Washington daily by US Army planes from Hickam Field, Honolulu.

2305. Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 12:28:32 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <j0dmi0hdomk05thl5du4iqelreieakhvek@4ax.com>
Source record: 90476

Hi All,

I have some info on a Beverage antenna that I believe you'll find interesting.

During 1942-43 I was with the Radio Intelligence Division of the FCC in Hawaii, monitoring enemy transmissions. One assignment by the State Department was to determine whether the Japanese in Japan were getting the same information from their local broadcasts as the propaganda broadcast on HF, or different information concerning the progress of the War.

On searching the AM broadcast band for Japanese stations we found JOAK, Tokyo, on 650 kHz, with an exceptionally strong nighttime signal. However, KNX, Los Angeles, also on 650, was equally strong, making copy of JOAK impossible. Consequently, two of my colleagues, Prose Walker, W4BW, and Edwin Rudisuhle, K6SAC, installed a Beverage antenna on the northern shore of Oahu to reduce the interference from KNX. The Beverage was more than one-half mile long at a height of 10 feet, aimed directly at Tokyo, and terminated with a variable resistor. The signal from KNX was totally nulled out with the adjustment of the terminating resistor.

The State Department was pleased with the results, because we were then able to record the JOAK broadcasts daily, with the records sent to Washington daily by US Army planes from Hickam Field, Honolulu.

Walt, W2DU

2306. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 12:30:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgfcdempf1@sparta.btinternet.com>
Source record: 90477

"Cecil Moore" wrote
> Of course, depending upon the impedance seen by the choke, the
> choking function may be virtually non-existent. For instance,
> 5000 ohms is not an unusual impedance in a system of this sort.
> The choke would need about 25,000 ohms of choking impedance. I
> don't know where to obtain such a choke.
==========

Cec, if the circuit impedance at the location of the choke is so high that
the extra impedance of the choke is ineffective, then the current must be so
small a choke is not needed anyway. So what are you worried about?

Reg.

2307. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 12:32:41 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <06dmi01hsrvcchv1q1beqbeqf2tggti3iu@4ax.com>
Source record: 90478

On Tue, 24 Aug 2004 12:28:32 GMT, Walter Maxwell <w2du@iag.net> wrote:
>snip

>The State Department was pleased with the results, because we were then able to
>record the JOAK broadcasts daily, with the records sent to Washington daily by
>US Army planes from Hickam Field, Honolulu.
>
>Walt, W2DU

Sorry, Guys, I had trouble learning how to get a file into the rraa. Please excuse the mess I made. I got an error msg that said the first post above was not posted.

Walt

2308. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 12:45:35 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040824084535.05745.00003396@mb-m14.aol.com>
Source record: 90479

>Yuri, the problem with you arguing Tom's position is that nothing is
>said of this glaring difference. It is quite remarkable (or I made
>some remarkable mistake or the wire is just too short as I mentioned)
>and it DOES denote a dramatic departure from accepted Beverage
>characteristics which has been undisclosed as a comment from Tom, if
>in fact he offered it. This 8dB loss does make sense in that you have
>a leaky transmission line in a death embrace with ground. The wires
>would split the power and the lower power contribution would certainly
>attempt to warm the worms with more gusto.
>[IF perhaps we were to employ the old twinlead twist every foot or
>so, we might find things evened out ;-)]
>
>I will let that simmer for this evening.
>
>73's
>Richard Clark, KB7QHC

Here is the perhaps the best outline of the "problem" by VE7DXR and you might want to try to plug it into program to see the correlation.
Yuri

>>Observations done here 8 and 15 years ago using a 600m Beverage on the MW broadcast band seem to verify the above statement. Even though the DC resistance of the wire is naturally very low, it was found that the "counterpoise" lying on the ground underneath the antenna, and connecting the ground rod at the far end of the Beverage with the ground rod at the receiver end's matching transformer, in fact, was acting like a "Beverage on Ground", rather than a short circuit between ground rods. That is, it delivered a signal to the grounded side of the matching transformer. The result was that signal strengths often were stronger from transmitters broadside to the antenna (10 dB or so), the occasional solid nulls on signals from the back of the antenna were degraded, and little increase in signal strength from signals from the far end of the antenna were observed.

Those of us who performed this experiment stopped using "counterpoises" from that point forward, unless we used them as antennas in their own right.
best wishes,
Nick, VE7DXR<<

2309. Re: unable to tune doublet at higher freq.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 12:56:11 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <87zn4k8zkk.fsf@qmc.ph.msstate.edu>
Source record: 90480

>I have a 135' long doublet, 45' in the air fed with 450 ohm ladderline. It
>tunes fine and works well through an MFJ tuner on all bands up to 21MHz.
>Above 21MHz I have a very difficult time tuning the antenna to get any SWR
>below 3:1. I cut 6' off the feedline when it was finally dressed into my
>shack and that made it worse. I have now reinstalled the extra 6' and that
>is better for tuning, but not yet perfect. I guess I'll just have to keep
>adding or subtracting small amounts of feedline to get it right?

Yes, try adding some feedline.

I have a ~120' doublet center fed with ladderline. No problem matching it
on 80/40/20/15/10 with a Johnson Matchbox. But I did have to change the
feedline length from what I started with.

Torsten
N4OGW

2310. Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 13:36:26 UTC
From: Micro MegaWatt <MMW@power.net>
Message-ID: <uvHWc.131575$sh.83524@fed1read06>
Source record: 90481

Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
feeder

Understand it is scarce in the USA but may be available in the UK

Sources anyone? thanks
--
One Watt

To steal ideas from one person is plagiarism;
to steal from many is research.
-- Comedian Steven Wright

2311. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 13:37:26 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10imh76oa1as746@corp.supernews.com>
Source record: 90482

zip cord
"Micro MegaWatt" <MMW@power.net> wrote in message
news:uvHWc.131575$sh.83524@fed1read06...
> Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
> feeder
>
> Understand it is scarce in the USA but may be available in the UK
>
> Sources anyone? thanks
> --
> One Watt
>
> To steal ideas from one person is plagiarism;
> to steal from many is research.
> -- Comedian Steven Wright
>
>
>
>

2312. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 14:33:38 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <412b4b06.436016984@news.galilei.com>
Source record: 90483

Hi Phil

The bandwidth on 160 was so narrow it was basically only good on one single frequency for me. Which was OK, I set it for a specific frequency I used twice a week.

All of my other 160 work was done on that Linear Loaded Inverted Vee that I put up. I had pigtails on it and set each leg at a different frequency and it still worked OK for me.

As far as the HF9V I was and am still very impressed with how well this antenna has worked for me. Especially in the confines of my suburban yard with antenna restrictions up the wazoo.

But FINALLY I moved to a new state, I live in a valley between the Cumberland Plateau and the Smoky Mountains, due to the hill behind my house, sunup isn't until around 9AM. But it is a very high hill and THAT is where I plan on building my antenna farm.
I've made many calculations and studied the lay of the land several times, it looks like the ideal spot for this area.
My only concern will be the coax loss in running over 600 feet of coax up the side of the hill. I would need 9913 for the upper bands.

I'm also looking into the possibly of using perhaps a 6 inch wide ladder line. But I'm not savvy enough to know if I can run coax out of the shack to ladder line for 500 feet then back to coax to feed the antenna towers. This is something I will have to study up on again before attempting it.

I may try a trick a neighbor about a mile away has done. We have extremely tall poplar trees here. He cleaned the branches and topped one of these poplars and then installed a 25 foot tall mast at the top of one of them for his VHF/UHF antennas. He said it's been up there for over 5 years and the new branches that sprouted have not come close to the antenna yet. So that might be one alternative for me to try also.

The HF9V will be ground mounted at the dividing line between my front lot and my back lot, which is only partially up the back hill in a flat clearing where I have plenty of room to run my overkill radials.
At my last home in St. Louis, I had over 3,500 feet of radials, some extending through neighbors yards until they reached the streets on the other side of their houses.
And, where backyards meet, many had those stockade fences and they allowed me to run dipoles across their backyards about 10 feet above the fence lines by installing 25 foot poles affixed to the fence

posts. POed the telephone and cable TV people who had to watch for my lines when working on the utility pole mounted services within their easements. I was not within their easement so they couldn't just knock them down and leave them laying on the ground, hi hi.....

It was so long ago, I don't remember which bands these apply to, but those horizontal metal strips on the antenna. On the upper one (after installing the 160 coil) I took a pair of alligator clips and a piece of wire about 4 inches long (2 inches each side) and experimented by making this top bar a little wider. I do remember it worked for whatever reason I was doing it. So I drilled two small holes in each end and laced a new copper wire through this allowing about 1-3/4 inch extending beyond the natural length of this horizontal antenna member. But I believe this may have been to use an out of ham band frequency for our emergency communications. The antenna was up for several years, so you tend to forget things you had to do when it was initially installed.
I never had problems with it, so I never messed with it.

It seems there are some photos on my web page somewhere, but I don't know if they include the HF9V or not.
The URL is http://archimedes.galilei.com/raiar if you want to have a look around and see. I'm quite lax on updating my web page, and it seems I never remove anything, just add from time to time. So there's no telling what you may find there.

TTUL - 73+ de Gary - KG&#65533;ZP

2313. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 15:32:20 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <8cJWc.6903$%11.5485@trnddc02>
Source record: 90484

"H. Adam Stevens, NQ5H" <NQ5H@ARRL.net> wrote in message
news:10imh76oa1as746@corp.supernews.com...
> zip cord
> ...
> > Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
> > feeder
> >
> > Understand it is scarce in the USA but may be available in the UK
> >
> > Sources anyone? thanks
> > --
> > One Watt
> >
> > To steal ideas from one person is plagiarism;
> > to steal from many is research.
> > -- Comedian Steven Wright
> >
> >
> >I think if you do the math, any benefit of using balanced 75 Ohm line-
especially zip cord with a lossy vinyl dielectric will be lost- especially
if not running at low VSWR conditions.
My impressiion is that ladder line or balanced line is advantageous when the
line is run at a high VSWR. The low matched loss then also means a low loss
when run at high VSWR.

Dale W4OP
> >
>
>

2314. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 15:49:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f7omi055va4e8ov7bdb69thha6ssa2n2ou@4ax.com>
Source record: 90485

On 24 Aug 2004 12:45:35 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:

>Here is the perhaps the best outline of the "problem" by VE7DXR and you might
>want to try to plug it into program to see the correlation.

Hi Yuri,

I don't see how. On the face of it, it doesn't make sense.

>>it delivered a signal to the grounded side of the matching transformer.

It is all fine and well to observe that a wire draped along the ground
picks up signal (such an antenna I have seen "named" the Snake in the
Grass Antenna which is more an open terminated coax). However to
proudly state that it delivers it to ground begs the obvious comment
"how do you know?"

You must in fact break the connection, insert a load, and this means
it no longer delivers it to ground (can't have your cake and eat it
too). Such receive antennas are admittedly poor in efficiency but
useful as "quiet" antennas (where the receiver gain makes up for low
efficiency).

To cap it off, what is the "problem" anyway?

73's
Richard Clark, KB7QHC

2315. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 15:55:45 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgfoe1$g8k$1@titan.btinternet.com>
Source record: 90486

There's no such things as 72 or 75 ohm ladder line.

Ladder-line wires are spaced much too far apart and have mostly air insulation. They have impedances from 300 ohms and upwards.

Expect to find very low impedances only with twin-wires embedded in a thick, circular or elliptical PVC sheath. Loss per unit length is quite high and suitable only for directly feeding, resonant, single-band, 1/2-wave dipoles at the lower frequencies.

Zip-cord and twin speaker cables have Zo between 120 and 135 ohms. 16 to 20-gauge, colourless, speaker cables make a fair compromise between impedance, loss, SWR and small size. And exact impedance values are never critical at HF.

Reg, G4FGQ

2316. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 16:33:59 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0408240833.1857aa89@posting.google.com>
Source record: 90487

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:<$VzTYJGVQeKBFA5j@ifwtech.co.uk>...

> Before you do, you'd better read this:
> http://www.diyfaq.org.uk/humour.html#foam
>
> For 'canoe', read 'kayak'... and don't say that nobody warned you!

Worth an epic poem!

I particularly liked the bit about the wailing and the hair removal.

Yes, I was already rather concerned about this. The so called
"mono-component" storebought PU foam is sometime better referred to as
"waterblown". It's rated 90% closed cell, which is fine giving the
tiny size of the typical cell and the all-around sealing I am going to
provide anyway.

The problem is, the expansion ratio is hugely unpredictable. It is
said to go up from 8 to over 20 "if water is present", with "present"
being left undefined, and probably undefinable as well, although
"wetting" is recommended.

Moreover, as the unlucky canoe builder found, penetration, bonding,
expansion, and setting go hand in hand, meaning the stuff performs
this remarkable routine:
- penetrate every nook and cranny
- soak up water
- stick to surfaces
- gain some texture and firmness
- arch its back and expand (for waterblown: at some ill defined rate
too!), bending out of whack anything that is not as firm as stone or
steel

I did a test in a small box (translucent, probably polyethylene,
formerly contained a bike tyre repair kit). I put in a couple of
airwound bare copper coils, half inch apart, rinsed it all in water,
and while it was wet I sprayed in some foam (_not_ to the point of
filling it), closed it, and wrapped it tight with wire to provide real
closing power. I could see that the foam had not yet filled the
cavity. The DC resistance between the two coils had dropped from
unmeasurable (>2Meg) to 150k.

24h later, resistance was back up to unmeasurable, the box looked
completely filled, nice big round blobs of foam had formed all around
the lid, and all the surfaces of the box had become warped under
pressure. Chances are, the coils had been bent around as well - I

could not check if they were short of a CAT scan, for which I am not yet equipped.

If I'll do foam my balun box - and it's still a big if - I'll first fashion and fit a temporary, ~50% perforated lid, to give the foam an easy way out, and to make it easier for me to remove the excess foam later on.

I'll be very careful if I ever have to do the same to a canoe.

2317. Re: Noise and Loops Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 16:56:15 UTC
From: tangerame@earthlink.net
Message-ID: <ecb0f5f9.0408240856.460c51d3@posting.google.com>
Source record: 90488

Thanks to all who replied. The static roblem is one I hadn't thought of.It is indeed a "Crackling" but is also very constant, unlike an arc followed by some quiet. For what it's worth I had the powerline company check and they said it was "Clear for miles". Oh well. The balun/choke/resistor is easy enough to try.I'll report back on what I find. Thanks!

Tony WA6LZH

tangerame@earthlink.net (Tony Angerame) wrote in message news:<ecb0f5f9.0408230901.652bebe3@posting.google.com>...
> This is more of an account than a question but here goes. I have a
> second
> qth in the Sierra at about 4000 feet. The soil is rocky and dry,
> especially this time of year. Using a G5RV at about 40 feet in a tree
> I was plagued by a surprisingly high noise levelon 80/40 meters. It
> sounded like power line noise but I can't say for sure. Playing with
> various grounding schemes seemed to help somewhat but never really got
> rid of the noise. One scheme seemed to work for awhile and the next
> week it didn't.
>
> The solution was to close in the bottom of the G5RV forming a full
> wave loop.
> The noise is no longer discernible. It went from approximately an s-6
> to zero!
>
> My question is: What can I conclude from this? Either concerning the
> nature of the noise or the efficacy ofthe solution. Loops is gud?
>
> Aside, the loop seems to be good close in as it is fed from the top
> (Like a G5RV) but I am considering a corner feed to improve low angle.
>
> Tony WA6LZH

2318. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 17:40:47 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgfuiv$ev5$1@sparta.btinternet.com>
Source record: 90489

"Reg Edwards" wrote
> "Cecil Moore" wrote
> > Of course, depending upon the impedance seen by the choke, the
> > choking function may be virtually non-existent. For instance,
> > 5000 ohms is not an unusual impedance in a system of this sort.
> > The choke would need about 25,000 ohms of choking impedance. I
> > don't know where to obtain such a choke.
> ==========
>
> Cec, if the circuit impedance at the location of the choke is so high that
> the extra impedance of the choke is ineffective, then the current must be
so
> small a choke is not needed anyway. So what are you worried about?
> ---
> Reg.
>
==========
Dear Cec,

Just another comment about your oft-described high-impedance choke problem.

In all these discussions the LOCATION of the choke along the transmission line is always neglected. Yet its location is as just as critical as its value. If critical it is!

If a two-wire, unbalanced-to-balanced choke is deemed necessary then it should be located at a lower impedance point in the system where it is effective.

On the other hand, because very high impedances occur only on sharply resonant lines, problems may occur, if they ever do, only at rare sharply defined locations which can usually be ignored even if a resonant frequency should occur in an amateur band. An operator would very likely be unaware of it.

What would be the symptoms? Increased RF in the shack?

The solution of such a rare problem, if it occurs, is just to change the length of the transmission line by a small amount. But you are accustomed to doing this anyway to save yourself the cost of a tuner. ;o)

Changing the line length will shift an offending high impedance point away from the choke location.

This very moment it has just come to my wandering mind that you are in the habit of deliberately changing line length to bring the impedance down to a value between 25 and 100 ohms at which a choke is certainly fully effective.

So your worries about obtaining an exraordinary high inductance choke really don't exist.

(Just to tidy up, the length of wire on the choke should ideally be less than a quarter-wavelength otherwise funny effects occur. And this places a limit on its inductance. But that's just another factor which contributors to the argument seem to be unaware of.)

Yours, Reg. G4FGQ

2319. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 18:01:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5b3fi01n0jvirp8cg0vo9uct65bee3m6j1@4ax.com>
Source record: 90490

On Tue, 24 Aug 2004 17:40:47 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>In all these discussions the LOCATION of the choke along the transmission
>line is always neglected.

Hi Reggie,

You undoubtedly neglect the discussion, but Roy has posted to this
quite often.

73's
Richard Clark, KB7QHC

2320. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 18:37:37 UTC
From: uce@ftc.gov
Message-ID: <nIqdnX0mf7RvF7bcRVn-ig@comcast.com>
Source record: 90491

Interesting and informative post, Gary. It seems we live about 35 miles apart. I am in Kingston. I can appreciate your terrain. I have tried several 70 cm skeds and finally had success on one into north GA. I usually tell anyone who asks that I am blocked in every direction except up. Of course, that isn't all bad since one of my main interests is 2 meter EME. I visited one of the locals on top of one of these hills a while back, and he had an S-9 noise level on 2 while I had very quiet condx at my QTH.

The narrow bandwidth on 160 isn't much of a problem since I primarily operate cw on HF. I began chasing a DXCC on 80 CW earlier this year.

73,

Phil - N1KI

In article <412b4b06.436016984@news.galilei.com>, raiar@slacc.com.nospam wrote:
>Hi Phil
>
>The bandwidth on 160 was so narrow it was basically only good on one
>single frequency for me. Which was OK, I set it for a specific
>frequency I used twice a week.
>
>All of my other 160 work was done on that Linear Loaded Inverted Vee
>that I put up. I had pigtails on it and set each leg at a different
>frequency and it still worked OK for me.
>
>As far as the HF9V I was and am still very impressed with how well
>this antenna has worked for me. Especially in the confines of my
>suburban yard with antenna restrictions up the wazoo.
>
>But FINALLY I moved to a new state, I live in a valley between the
>Cumberland Plateau and the Smoky Mountains, due to the hill behind my
>house, sunup isn't until around 9AM. But it is a very high hill and
>THAT is where I plan on building my antenna farm.
>I've made many calculations and studied the lay of the land several
>times, it looks like the ideal spot for this area.
>My only concern will be the coax loss in running over 600 feet of coax
>up the side of the hill. I would need 9913 for the upper bands.
>
>I'm also looking into the possibly of using perhaps a 6 inch wide
>ladder line. But I'm not savvy enough to know if I can run coax out
>of the shack to ladder line for 500 feet then back to coax to feed the
>antenna towers. This is something I will have to study up on again
>before attempting it.

>
>I may try a trick a neighbor about a mile away has done. We have
>extremely tall poplar trees here. He cleaned the branches and topped
>one of these poplars and then installed a 25 foot tall mast at the top
>of one of them for his VHF/UHF antennas. He said it's been up there
>for over 5 years and the new branches that sprouted have not come
>close to the antenna yet. So that might be one alternative for me to
>try also.
>
>The HF9V will be ground mounted at the dividing line between my front
>lot and my back lot, which is only partially up the back hill in a
>flat clearing where I have plenty of room to run my overkill radials.
>At my last home in St. Louis, I had over 3,500 feet of radials, some
>extending through neighbors yards until they reached the streets on
>the other side of their houses.
>And, where backyards meet, many had those stockade fences and they
>allowed me to run dipoles across their backyards about 10 feet above
>the fence lines by installing 25 foot poles affixed to the fence
>posts. POed the telephone and cable TV people who had to watch for my
>lines when working on the utility pole mounted services within their
>easements. I was not within their easement so they couldn't just
>knock them down and leave them laying on the ground, hi hi.....
>
>It was so long ago, I don't remember which bands these apply to, but
>those horizontal metal strips on the antenna. On the upper one (after
>installing the 160 coil) I took a pair of alligator clips and a piece
>of wire about 4 inches long (2 inches each side) and experimented by
>making this top bar a little wider. I do remember it worked for
>whatever reason I was doing it. So I drilled two small holes in each
>end and laced a new copper wire through this allowing about 1-3/4 inch
>extending beyond the natural length of this horizontal antenna member.
>But I believe this may have been to use an out of ham band frequency
>for our emergency communications. The antenna was up for several
>years, so you tend to forget things you had to do when it was
>initially installed.
>I never had problems with it, so I never messed with it.
>
>It seems there are some photos on my web page somewhere, but I don't
>know if they include the HF9V or not.
>The URL is http://archimedes.galilei.com/raiar if you want to have a
>look around and see. I'm quite lax on updating my web page, and it
>seems I never remove anything, just add from time to time. So there's
>no telling what you may find there.
>
>TTUL - 73+ de Gary - KGZP
>
>

Anti-spam measure to direct unwanted e-mail
to the FTC's unsolicited commercial e-mail address.

For direct reply, use my callsign in arrl.net
format or look me up on qrz.com

2321. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 18:57:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgg325$4s$1@titan.btinternet.com>
Source record: 90492

As is usual for you, choice of the word "neglect" is entirely inappropriate.

Punchinello.

2322. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 19:04:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d64ni0136th3555f3sg3bnshs0nb4spik3@4ax.com>
Source record: 90493

On Tue, 24 Aug 2004 18:57:09 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>As is usual for you, choice of the word "neglect" is entirely inappropriate.
>----
>Punchinello.
>

Hi Reggie,

Your apology is accepted.

73's
Richard Clark, KB7QHC

2323. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 19:12:24 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <412B9318.2000805@psu.edu>
Source record: 90494

Walter Maxwell wrote:
> On Tue, 24 Aug 2004 12:28:32 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
>>snip
>
>
>>The State Department was pleased with the results, because we were then able to
>>record the JOAK broadcasts daily, with the records sent to Washington daily by
>>US Army planes from Hickam Field, Honolulu.
>>
>>Walt, W2DU
>
>
> Sorry, Guys, I had trouble learning how to get a file into the rraa. Please
> excuse the mess I made. I got an error msg that said the first post above was
> not posted.

Didn't get a file, but I enjoyed the story!

- Mike KB3EIA -

2324. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 19:48:29 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10in6sgj5tpg535@corp.supernews.com>
Source record: 90495

You've gotten a lot of conflicting advice. Let me add mine.

Without going through the numbers in detail, Paul, OH3LWR's analysis looks sound. However, he neglected one factor. The skin depth is also inversely proportional to the square root of the permeability. Some stainless steels are ferromagnetic, with a permeability I'd guess at 100 or more. That reduces the skin depth, and therefore increases the RF resistance, by at least a factor of 10. If you do the analysis with realistic numbers, you'll find that loss can become at least several dB if the wire is magnetic, and worse with longer (40 or 80 meter) dipole lengths.

So my recommendation is to check the wire with a magnet. If it's magnetic, expect longer antennas to be quiet and broadband (which amateurs crave) but lossy (which most don't seem to care about). Non-magnetic stainless isn't likely to produce objectionable loss, except perhaps at an 80 meter dipole length or longer.

You can get a qualitative feel for the loss by comparing the 2:1 SWR bandwidth of an antenna made from the wire with the bandwidth from a dipole made from copper wire. The broader it is, the lossier it is.

Roy Lewallen, W7EL

Dave wrote:
> I recently acquired a large quantity of very flexible stranded
> stainless steel wire at a garage sale. It is about 0.85 mm (around
> 1/32 inch) in diameter and extremely strong. I was wondering if this
> could be used for wire antennas for HF. I seem to remember seeing
> something about SS not being ideal. Is this a real consideration or
> just a matter of being too finiky?
>
> Thanks - Dave

2325. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 20:16:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgg7n7$689$1@titan.btinternet.com>
Source record: 90496

More succinctly, it all boils down to -

Copper antenna wires are so efficient (say 98 percent) an increase in loss
by 10 times (down to 80 percent) is not noticeable.

Reg

2326. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 21:00:22 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <W_NWc.14189$0o5.11987@bignews1.bellsouth.net>
Source record: 90497

> Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
> feeder

out of curiosity - why ?

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2327. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 21:09:13 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <n6ani0d5nfqv48toltf1laj48fhr7d7qim@4ax.com>
Source record: 90498

On Tue, 24 Aug 2004 12:48:29 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Without going through the numbers in detail, Paul, OH3LWR's analysis
>looks sound. However, he neglected one factor. The skin depth is also
>inversely proportional to the square root of the permeability. Some
>stainless steels are ferromagnetic, with a permeability I'd guess at 100
>or more. That reduces the skin depth, and therefore increases the RF
>resistance, by at least a factor of 10.

My skin depth figures are base upon a quick web search, so I have no
idea how typical these figures might be or is it likely that the OP
would have a similar wire.

>If you do the analysis with
>realistic numbers, you'll find that loss can become at least several dB
>if the wire is magnetic, and worse with longer (40 or 80 meter) dipole
>lengths.

If my original assumptions are correct, the original poster (OP)
should also check the dissipation of each meter of antenna conductor,
since above 1.8 MHz, it appears that the power dissipation per meter
is slightly higher than at 1.8 MHz, thus the wire temperature is
higher (and might even affect the sag of the wire when
transmitting:-).

>So my recommendation is to check the wire with a magnet. If it's
>magnetic, expect longer antennas to be quiet and broadband (which
>amateurs crave) but lossy (which most don't seem to care about).
>Non-magnetic stainless isn't likely to produce objectionable loss,
>except perhaps at an 80 meter dipole length or longer.

In addition, since the OP had a large quantity of the wire, I would
suggest building a conical dipole antenna from the wire. Not only will
the current (and losses) in each leg be lower, but also the bandwidth
would be larger.

Paul OH3LWR

2328. Re: Noise and Loops Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 21:12:36 UTC
From: Aaron Jones <noemail@noemail.com>
Message-ID: <3vani0lop45k5neiev6vs5tl6eej713k58@4ax.com>
Source record: 90499

tangerame@earthlink.net (Tony Angerame) wrote:
>For what it's worth I had the powerline
>company check and they said it was "Clear for miles".

I'm not sure I'd trust my power company to say that they're ok. If you don't have a small battery operated SW receiver, get one. I have an old Sony model that turned out to be a needed piece of test equipment. I've used it several times over the years to localize QRN from the power lines, often right to the pole. When I could be specific about where and/or what the failure might be (leaking insulator, cap, transformer, ground/guy wire ect) , I usually got a quick response as this could be an indication of a more serious power line failure than just a complaining ham...

2329. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 21:25:02 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <pqbni0pvmnn2m25uoiruk0is64bteo4k3c@4ax.com>
Source record: 90500

On Tue, 24 Aug 2004 06:36:26 -0700, "Micro MegaWatt" <MMW@power.net>
wrote:

>Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
>feeder

Getting a _balanced_ feeder at such low impedance levels is quite
challenging, since a typical twisted pair (e.g.CAT5) would be in the
100-120 ohm range.

You _might_ get something in the balanced 50-75 ohm range by getting a
quad-pair cable and connecting the diagonally opposite conductors
together. Thus, if the original pair had an impedance of 140-150 ohms,
the two pars in the quad-pair cable would give 70-75 ohms.

Paul OH3LWR

2330. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 22:42:32 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <svPWc.175854$8_6.70527@attbi_s04>
Source record: 90501

Beldin 8210, I believe discontinued, was/is 75 ohm twin lead; and, it
was quite popular 30+ years ago.

I haven't seen it in years. Last usage was in the 1950s on a 40 meter
dipole connecting to a pair of 807s in P-P with a Shielded Faraday link
to keep the TVI down.

Does this bring back memories among the 'old timers'?

W1MCE 50 years.

Micro MegaWatt wrote:

> Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
> feeder
>
> Understand it is scarce in the USA but may be available in the UK
>
> Sources anyone? thanks
> --
> One Watt
>
> To steal ideas from one person is plagiarism;
> to steal from many is research.
> -- Comedian Steven Wright
>
>
>
>

2331. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 23:14:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <8ZPWc.2585$9P.466@trnddc04>
Source record: 90502

"Micro MegaWatt" <MMW@power.net> wrote in message
news:uvHWc.131575$sh.83524@fed1read06...
> Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
> feeder
>
> Understand it is scarce in the USA but may be available in the UK
>
> Sources anyone? thanks
> --
> One Watt
>

It may not be an answer to your question, but, 4 lengths of 75 ohm coax connected in series and parallel would result in 75 ohms, balanced. Two 50 ohm coax cables "paralleled" could provide 100 ohms balanced with the center conductors used as the balanced line.

Jerry

2332. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 23:25:44 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <412bd0fc_1@news1.prserv.net>
Source record: 90503

I was doing some work in central Oahu a few years back, and stayed out at the Turtle Bay hotel on the North Shore. One day we were out nosing around the area and ran across the site of that old Beverage. Some of the old timers who live out there still remember it. Also, there is a road named Radio or something in that vein which is what first attracted our attention.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Walter Maxwell" <w2du@iag.net> wrote in message
news:j0dmi0hdomk05thl5du4iqelreieakhvek@4ax.com...
>
> Hi All,
>
> I have some info on a Beverage antenna that I believe you'll find
interesting.
>
> During 1942-43 I was with the Radio Intelligence Division of the FCC in
Hawaii,
> monitoring enemy transmissions. One assignment by the State Department was
to
> determine whether the Japanese in Japan were getting the same information
from
> their local broadcasts as the propaganda broadcast on HF, or different
> information concerning the progress of the War.
>
> On searching the AM broadcast band for Japanese stations we found JOAK,
Tokyo,
> on 650 kHz, with an exceptionally strong nighttime signal. However, KNX,
Los
> Angeles, also on 650, was equally strong, making copy of JOAK impossible.
> Consequently, two of my colleagues, Prose Walker, W4BW, and Edwin
Rudisuhle,
> K6SAC, installed a Beverage antenna on the northern shore of Oahu to
reduce the
> interference from KNX. The Beverage was more than one-half mile long at a
height
> of 10 feet, aimed directly at Tokyo, and terminated with a variable
resistor.
> The signal from KNX was totally nulled out with the adjustment of the
> terminating resistor.
>
> The State Department was pleased with the results, because we were then
able to

> record the JOAK broadcasts daily, with the records sent to Washington
daily by
> US Army planes from Hickam Field, Honolulu.
>
> Walt, W2DU

2333. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 23:35:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412bd229$1_8@corp.newsgroups.com>
Source record: 90504

Reg Edwards wrote:
> Cec, if the circuit impedance at the location of the choke is so high that
> the extra impedance of the choke is ineffective, then the current must be so
> small a choke is not needed anyway. So what are you worried about?

If the current is small, the voltage is large and metal microphones
burn holes in my lips. Seriously, I still have a scar on my lip from
the 50's so you might say that's what I'm (still) worried about.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2334. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 23:42:52 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412bd3ec_8@corp.newsgroups.com>
Source record: 90505

Reg Edwards wrote:
> So your worries about obtaining an exraordinary high inductance choke really
> don't exist.

You're right, Reg, for you and me. But how about all the other
unwashed masses who are incapable of locating the common-mode
current-maximum point on their transmission lines? :-) What is
your advice for them?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2335. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-24 23:48:58 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <KtQWc.88$uq1.72755@twister.southeast.rr.com>
Source record: 90506

"Minnie Bannister" <GoonButNotForgotten@NottheBBC.org> wrote in message
news:10il33m2mvrjn70@corp.supernews.com...
> www.steppir.com
>
> Alan NV8A
>
>
> On 08/23/04 04:23 pm Jimmie put fingers to keyboard and launched the
> following message into cyberspace:
>
> >>>How is it I get the feeling they are not trying to develope the
remotely
> >>>tunable antenna. Seem to me someone just wants to have the patent on
the
> >>>idea
>
> >>Huh?
> >>They developed it, making it and selling like a hotcakes. That's the
idea,
> >
> > to
> >
> >>have a patent on the idea for terrific product!
>
> > Really, didnt know the things were on the market.

What happens when one of these antennas takes a lightning strike. .

2336. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 00:44:53 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10ino85bsfpg4bd@corp.supernews.com>
Source record: 90507

The links to the patent application for the SteppIR are in the original post that started this thread. *Perhaps* what was new was the microprocessor control unit that can sit between the rig and the antenna and readjust the antenna as the rig is tuned. But since I haven't seen the RadCom one to which you refer, I don't *know* what is new in the SteppIR.

Alan NV8A

On 08/23/04 09:26 pm aunwin@insightbb.com put fingers to keyboard and launched the following message into cyberspace:

> There are other remote control antennas that have been patented. In fact
> there is a patent already in the mix that uses exactly the same method as
> the STEPPER that was printed in RADCOM several years ago.What exactly did
> the new patent claim?

>>www.steppir.com

2337. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 00:54:26 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10inoq4b3pvptde@corp.supernews.com>
Source record: 90508

Some SteppIR antennas have been up for a year or more already and have survived high winds and ice storms, but I don't recall hearing of any lightning strikes.

The antenna itself has only beryllium-copper tapes whose length is adjusted by stepper motors, the latter being pretty robust devices by all accounts.

The sensitive electronics (microprocessor control unit) are in the shack rather than up on the tower, so the smart thing to do would be to disconnect and ground the control cable when not in use (after retracting the elements completely), just as one would disconnect and ground the feed line.

Alan NV8A

On 08/24/04 07:48 pm Jimmie put fingers to keyboard and launched the following message into cyberspace:

>>www.steppir.com

> What happens when one of these antennas takes a lightning strike. .

2338. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 00:55:03 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <4loni0dlerlaj7hhmievhs5sv66ugencc0@4ax.com>
Source record: 90509

On Tue, 24 Aug 2004 18:25:44 -0500, "Crazy George" <muNnscOh@attSglPobaAl.nMet>
wrote:

>I was doing some work in central Oahu a few years back, and stayed out at
>the Turtle Bay hotel on the North Shore. One day we were out nosing around
>the area and ran across the site of that old Beverage. Some of the old
>timers who live out there still remember it. Also, there is a road named
>Radio or something in that vein which is what first attracted our attention.

Veery Interrrresting! I'd like to add that during my piddling around with
antennas at RCA Princeton from 1949 to 1980 I had the prviledge of knowing Dr.
Harold Beverage. What a great man he was in furthering the art and science of
communication.

Walt, W2DU

2339. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 00:58:34 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <puoni09bosnreck56ml9rlqegsf77ep2rd@4ax.com>
Source record: 90510

>snip

>> Sorry, Guys, I had trouble learning how to get a file into the rraa. Please
>> excuse the mess I made. I got an error msg that said the first post above was
>> not posted.
>
>
> Didn't get a file, but I enjoyed the story!
>
> - Mike KB3EIA -

Glad you enjoyed the story, Mike, but you lost me saying 'didn't get a file'.

Walt, W2DU

2340. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:03:32 UTC
From: k9sqg@aol.com
Message-ID: <20040824210332.15298.00002383@mb-m04.aol.com>
Source record: 90511

450 ohm is often preferred for multiband antennas. But 72 ohm is available in the US, can't remember if Davis RF, RadioWorks, or who that carries it.

2341. Found - Source for 72 Ohm Transmission Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:08:39 UTC
From: Micro MegaWatt <MMW@power.net>
Message-ID: <qERWc.132276$sh.125700@fed1read06>
Source record: 90512

Electronic Surplus Inc still has 72 ohm TX line. URL:

http://www.electronicsurplus.com/commerce/catalog/spcategory.jsp?category_id
=2170&czuid=1093172851680

Has Belden 8910

8210 BELDEN WIRE NEW TWINAX 72-OHM COAX CABLE 13 AWG POLYETHYLENE
PARRALLEL TRANSMISSION WIRE 10-FOOT MIN PURCHASE BROWN JACKET

Thanks to all who answered especially W1MCE who come up with the Belden
number -- the Google found the surplus site.
--
One Watt

To steal ideas from one person is plagiarism;
to steal from many is research.
-- Comedian Steven Wright

2342. Re: G5RV vs. G5RV Jr.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:12:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cggp2a$lf5$1@sparta.btinternet.com>
Source record: 90513

"Cecil Moore" wrote
> Reg Edwards wrote:
> > So your worries about obtaining an exraordinary high inductance choke
really
> > don't exist.
>
> You're right, Reg, for you and me. But how about all the other
> unwashed masses who are incapable of locating the common-mode
> current-maximum point on their transmission lines? :-) What is
> your advice for them?

==========

They don't need any. The unwashed can consider themselves fortunate at
being unaware of a problem which doesn't exist if they tune up using the TLI
in their accustomed manner.

Imagined swr, reflected power, conjugate match and virtual open circuit
problems also vanish into thin air.

Reg, G4FGQ

2343. Re: Found - Source for 72 Ohm Transmission Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:18:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412bea4f$1_8@corp.newsgroups.com>
Source record: 90514

Micro MegaWatt wrote:
> Thanks to all who answered especially W1MCE who come up with the Belden
> number -- the Google found the surplus site.

Please allow me to point out that 75 ohm balanced line is not
much better than 75 ohm coax. The key to reducing losses at
HF is getting the Z0 as high as possible, i.e. the current as
low as possible. Last time I checked, there was no 600 ohm coax.
What's wrong with this picture?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2344. Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:30:33 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-2A2F91.20303224082004@newssvr24-ext.news.prodigy.com>
Source record: 90515

I am planning to put up an inverted-L along side my tower per the
drawing at

http://www.bloomington.in.us/~wh2t/invertedl.html

I would appreciate some suggestions for 12 and 30 inches stand offs
to support the 12g insulated wire I plan to use. Also the wire needs to
be secured at the top before it bends over. Any suggestions to keep it
from slipping at that point will be appreciated.

I plan to ball part the length at 130 feet and see what happens.

Dick, AA5VU
call at ARRL.net

2345. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:43:53 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <vfrni0luh3fl7hrd06acm36bvmtsou9ms6@4ax.com>
Source record: 90516

On 25 Aug 2004 01:03:32 GMT, k9sqg@aol.com (K9SQG) wrote:

>450 ohm is often preferred for multiband antennas. But 72 ohm is available in
>the US, can't remember if Davis RF, RadioWorks, or who that carries it.

None of the usual suppliers carry anything but 300 & 450 ohm line
nowadays. I suspect the 75 ohm isn't made anymore -- it's pictured in
my 1985 arrl handbook, but nothing more recent. (The stuff is real
skinny -- about like zipcord.)

bob
k5qwg

2346. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 01:54:49 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040824215449.14599.00002307@mb-m29.aol.com>
Source record: 90517

>
>Veery Interrrresting! I'd like to add that during my piddling around with
>antennas at RCA Princeton from 1949 to 1980 I had the prviledge of knowing
>Dr.
>Harold Beverage. What a great man he was in furthering the art and science
>of
>communication.
>
>Walt, W2DU
>
>

Hi Walt,

did you have anything to do with AT&T Rhombic site at Ocean Gate, NJ?
I recently went to look at it, what a FARM!

73 Yuri, K3BU

2347. Linux Stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 02:00:29 UTC
From: RCM <rkmr15203@yahoo.com>
Message-ID: <cggrnu$1c50$1@news.aspstation.net>
Source record: 90518

http://linuxshop.ru/linuxbegin/win-lin-soft-en/table.shtml

Be sure to scroll down !!!!

2348. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 02:01:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10inso8ki3eih68@corp.supernews.com>
Source record: 90519

I'm not sure what the interest might be in the application, if a patent has been issued. Typically, an application undergoes modification -- sometimes, extreme modification -- before the patent issues. And only the patent carries any prohibition about anyone making, using, or selling the item.

The patent (6,677,914) is interesting in that it's a patent not for an antenna, or a method of tuning the antenna, but a system which includes the antenna, a transmitter/receiver, and "means to coordinate the means for adjusting the length of said conductive members to receive a desired frequency used by said radio transmitter/receiver." To see exactly what is patented, look up the patent at the USPTO's web site and read claims 1 and 16. Those describe exactly what is patented -- the patented system includes all the components in either claim. (The remaining claims are more restrictive, put there in case the less restrictive claims are deemed invalid in the future.) Only a system which includes all the components in a claim is covered under the patent, except for modifications "obvious to one skilled in the art".

DISCLAIMER: I'm not an attorney, patent or otherwise. This is based on my limited and layman's knowledge of the law. Don't regard it as legal advice -- see a qualified patent attorney if you need real legal advice.

Roy Lewallen, W7EL

J. McLaughlin wrote:
> Dear Group:
> One may see a patent application for the "SteppIR" antenna on the
> PTO's web site.
>
> Look for:
> 20020171598 Tunable antenna system
>
> Punch in the above number here:
> http://appft1.uspto.gov/netahtml/PTO/srchnum.html
>
> The application issued as patent 6,677,914.
>
> I can not remember if this has been posted. 73 Mac N8TT
>
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net
>

2349. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 02:14:58 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <CCSWc.102970$Lj.1812@fed1read03>
Source record: 90520

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote
> I am planning to put up an inverted-L along side my tower per the
> drawing at
>
> http://www.bloomington.in.us/~wh2t/invertedl.html
>
> I would appreciate some suggestions for 12 and 30 inches stand offs
> to support the 12g insulated wire I plan to use. Also the wire needs to
> be secured at the top before it bends over. Any suggestions to keep it
> from slipping at that point will be appreciated.
>
> I plan to ball part the length at 130 feet and see what happens.
>
> Dick, AA5VU
> call at ARRL.net

Hi Dick, hope you get some good ideas for stand-offs - I'm building the same thing, but using a 90' tall loblolly pine branch, no stand-offs required ;-) I will use standing rigging and a nylon block (prob 4") to make the turn at the top (limb) as this minimizes overtensioning due to wind action between my pine-towers. And, I can always hoist a Balun up later , as below.

I have wondered what the performance difference would be between this Inverted-L (easy to erect) and the sloper or folded dipole, top-fed with a 4:1 Balun, but not as easy to fly. My 1/4~ will only be 107' so it's an easy job for the Inv-L...maybe I'll try the alternative if I'm not happy with it. But it it's not broke.....<G>

Jack
Virginia Beach

2350. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 02:41:55 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <aetni0p9hnpranolqd39ib4iu0hdoj8rov@4ax.com>
Source record: 90371

>Hi Walt,
>
>did you have anything to do with AT&T Rhombic site at Ocean Gate, NJ?
>I recently went to look at it, what a FARM!
>
>73 Yuri, K3BU

No Yuri, I was with RCA, the chief competitor of AT&T Communications. The RCA Communications system was on Long Island. The 100 kw transmitters were at Rocky Point and the receivers were at Riverhead. Each of these locations were huge antenna farms also, acres and acres. After satellites took over from hi-speed CW the Long Island operations ended and the acreage was given to the State of New York to be used as a State Park. However, the State wouldn't accept the property until all the antennas were removed at RCA's expense. This occurred in the late 1970's. A group of my colleagues went out there to pick up souvenirs. I have some 8" insulators used as separators for the long open wire transmission lines, and some of the 1/4" diameter copper wire used in the lines.

I should add that Dr. Beverage was the chief engineer for many years, and was also the one who designed the original system. Lot's of V beams and rhombics directed to many points on the globe.

Walt, W2DU

2351. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 03:14:53 UTC
From: "aunwin@insightbb.com"
Message-ID: <NuTWc.304708$a24.39955@attbi_s03>
Source record: 90372

Alan,
the article in RADCOM (UK) described the moveable radiator as a loop of material half of which contained a copper strip and the loop of material was driven by a motor such that the copper length was resonant.
Now a stepper motor is still an electrical motor which turns the shaft in a series of steps which is nothing unusual.
The use of a microprocessor to run a stepper motor is also normal as well as a comparitor system to control the length of the radiators to maintain resonance. There is also prior use of where the motors are enclosed and also controlled remotely.
Roy makes the point that the design in its entirety was the main claim which appears to be in the design patent bracket. Thus it would appear that the patent design in its entirety is protected which to my mind makes it one of the most weakest things to claim court protection but that is just my opinion. For amateurs who make their own antennas a patent does not really have any powers unless manufacture is a business.
It seems these days that those who move fast and take the cream and then quickly fade away can easily beat any justice system that reqiures a lot of cash and a strong push to get it moving on ones behalf. It is like the' pursuit of happiness' statement which gives one only the right to pursue but not to attain happiness"
ART
Minnie Bannister" <GoonButNotForgotten@NottheBBC.org> wrote in message news:10ino85bsfpg4bd@corp.supernews.com...
> The links to the patent application for the SteppIR are in the original
> post that started this thread. *Perhaps* what was new was the
> microprocessor control unit that can sit between the rig and the antenna
> and readjust the antenna as the rig is tuned. But since I haven't seen
> the RadCom one to which you refer, I don't *know* what is new in the
> SteppIR.
>
> Alan NV8A
>
>
> On 08/23/04 09:26 pm aunwin@insightbb.com put fingers to keyboard and
> launched the following message into cyberspace:
>
> > There are other remote control antennas that have been patented. In fact
> > there is a patent already in the mix that uses exactly the same method
as
> > the STEPPER that was printed in RADCOM several years ago.What exactly
did
> > the new patent claim?
>

> >>www.steppir.com

2352. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 03:46:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10io2s6d59hq846@corp.supernews.com>
Source record: 90373

aunwin@insightbb.com wrote:
> . . .
> Roy makes the point that the design in its entirety was the main claim which
> appears to be in the design patent bracket. . .

The term "design patent" refers to a kind of patent that applies to an esthetic design, such as a unique shape for a vase or the classic Coca-Cola bottle. The patent in question isn't a design patent (even though the claims describe a whole system) but a "utility patent". Design and utility patents are different critters. Each has its own sequence of numbers, and I believe they have different application processes. When a technical person speaks of a patent, he or she almost always means a utility patent.

I know this to be true only for U.S. patents; I don't know about the rules or terminology used in other countries. You can find more information about the two distinct kinds of U.S. patents at the USPTO website.

Roy Lewallen, W7EL

2353. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 03:51:26 UTC
From: "aunwin@insightbb.com"
Message-ID: <21UWc.310013$%_6.254309@attbi_s01>
Source record: 90374

Agreed
Art
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10io2s6d59hq846@corp.supernews.com...
> aunwin@insightbb.com wrote:
> > . . .
> > Roy makes the point that the design in its entirety was the main claim
which
> > appears to be in the design patent bracket. . .
>
> The term "design patent" refers to a kind of patent that applies to an
> esthetic design, such as a unique shape for a vase or the classic
> Coca-Cola bottle. The patent in question isn't a design patent (even
> though the claims describe a whole system) but a "utility patent".
> Design and utility patents are different critters. Each has its own
> sequence of numbers, and I believe they have different application
> processes. When a technical person speaks of a patent, he or she almost
> always means a utility patent.
>
> I know this to be true only for U.S. patents; I don't know about the
> rules or terminology used in other countries. You can find more
> information about the two distinct kinds of U.S. patents at the USPTO
> website.
>
> Roy Lewallen, W7EL

2354. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 03:51:32 UTC
From: dplatt@radagast.org
Message-ID: <10io364gulb9d7b@corp.supernews.com>
Source record: 90375

In article <NuTWc.304708$a24.39955@attbi_s03>,
aunwin@insightbb.com <aunwin@insightbb.com@insightbb.com> wrote:

> For amateurs who make their own antennas a patent does not really
>have any powers unless manufacture is a business.

In practice, you're largely correct.

In fact of law (here in the US), a patentholder *does* have the right
to forbid individuals from making and using a copy of the patented
device. You can build one to study it, or figure out improvements, or
figure out an alternative approach which isn't covered by the patent,
but the law says that if you actually make practical use of your
homebrew version of the patented invention, you're infringing.

As you say, this isn't likely to ever be enforced against individual
builders. However, there have been cases in the past where an
individual published plans in a magazine article, and the magazine was
sued or challenged by a patentholder for "contributory infringement"
(i.e. for inciting, encouraging, or enabling private individuals to
infringe on the patent, by building something according to the
published plans).

I've seen situations in the past where patent-holders have offered
individuals a royalty-free license to build a limited number of the
patented inventions, for personal use in a noncommercial context.
Sure seems like good, cheap PR to me!

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2355. Re: Found - Source for 72 Ohm Transmission Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 04:10:38 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <MiUWc.18644$cx.14701@bignews4.bellsouth.net>
Source record: 90376

```
">
> Thanks to all who answered especially W1MCE who come up with the Belden
> number -- the Google found the surplus site.
> --
> One Watt
>
I may be in error, but I THINK if you use 4 equal lengths of 75-ohm coax
with the shields soldered together - and then make them 2 'pairs' of
conductors - you'll end up with a 75-ohm balanced line. (You don't use the
shield as transmission conductors).
If I'm in error, I hope someone will correct me on this.
Thanks
Hal

---
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004
```

2356. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 04:22:03 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <utUWc.18655$cx.3857@bignews4.bellsouth.net>
Source record: 90377

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:8ZPWc.2585$9P.466@trnddc04...
> It may not be an answer to your question, but, 4 lengths of 75 ohm coax
> connected in series and parallel would result in 75 ohms, balanced. Two
50
> ohm coax cables "paralleled" could provide 100 ohms balanced with the
center
> conductors used as the balanced line.
>
> Jerry

I posted the same answer in his 'found' thread - but I wasn't sure if my memory was in correct operating order. At least your post gives me hope that my memory hasn't completely left me. :-)

I've used that scheme to make matching sections a few years back. 75-ohm cable comes in handy a lot of times.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004

2357. 600-ohm Coax and antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 04:48:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgh5nr$4ri$1@sparta.btinternet.com>
Source record: 90378

It will be of interest that if the inner conductor of 600 ohm coax is 18 gauge wire then the outer conductor diameter will be 22,000 times greater. ie., about 72 feet.

Not surprisingly, an 18-gauge wire at a height of 36 feet above ground has an impedance of the same order. Isn't it reassuring to see how things all fit nicely together.

2358. Re: Found - Source for 72 Ohm Transmission Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 07:22:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iofhjltteomaa@corp.supernews.com>
Source record: 90379

Hal Rosser wrote:
>
> I may be in error, but I THINK if you use 4 equal lengths of 75-ohm coax
> with the shields soldered together - and then make them 2 'pairs' of
> conductors - you'll end up with a 75-ohm balanced line. (You don't use the
> shield as transmission conductors).
> If I'm in error, I hope someone will correct me on this.
> Thanks
> Hal

Twinlead, ladder line, and other symmetrical lines are often called "balanced" lines -- as you've done here. But it's important to realize that there's nothing about these lines that causes the currents on the lines to be equal and opposite (or "balanced"). Imbalanced currents cause feedline radiation. Symmetrical lines can be unbalanced, and coax can be balanced. To learn a little more about this, see "Baluns: What They Do and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1.

Roy Lewallen, W7EL

2359. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 09:54:24 UTC
From: DGoncz@aol.com
Message-ID: <5d8971ea.0408250154.31002c70@posting.google.com>
Source record: 90380

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<thghi0t8j1m2po45f14caf9prmhobhk07p@4ax.com>...
> On 22 Aug 2004 10:01:17 GMT, dgoncz@aol.com (Doug Goncz) wrote:
>
> >OK, I've got it.
> >
> >ftp://users.aol.com/DGoncz/Antenna/
> >
> >WHFS in stereo at 3 AM.
> >
> >I note the plug has to be in just more than half way, not all the way for best
> >results. Maybe I should be using a balun, coax, and a phone jack adapter as
> >suggested.
>
> Yes, very much if things are this touchy. You are trying to feed a
> high Z antenna into a low Z cable. Radio Shack has a very common
> BalUn product designed to take care of this very simply (and using
> common coaxial products they sell too).
> >
> >
> >No active amplification is used.
>
> That's fine, but by all of your accounts, you are on the thin edge.
>
> >For now, primary Teri can live with this.
>
> Hi Doug,
>
> Teri may be able to get along with it much more, if you realized you
> have two antennas in one and simply remove one of them. Simple, is
> easier said than simple.
>
> By all appearances you have a combination FM-TV antenna as I see at
> least 5 elements (you don't show the entire antenna by the way) and
> you are only using 3 of them. Your connection should be at the end
> that is pointing (east) at the station you want to hear. If it is
> not, you have it pointed backwards and this may explain why things are
> so hinky. Another clue that you can verify. There should be another
> set of antenna connections (like wing nuts that presently you connect
> to) at the OPPOSITE end of the boom - n'est pas? They should be on
> the next to last elements before the end of the boom.
>
> 73's

> Richard Clark, KB7QHC

Dear Richard,

You (Richard Clark <kb7qhc@comcast.net>) wrote in message
news:<thghi0t8j1m2po45f14caf9prmhobhk07p@4ax.com>...
> On 22 Aug 2004 10:01:17 GMT, dgoncz@aol.com (Doug Goncz) wrote:
>
> >OK, I've got it.
> >
> >ftp://users.aol.com/DGoncz/Antenna/
> >
> >WHFS in stereo at 3 AM.
> >
> >I note the plug has to be in just more than half way, not all the way for best
> >results. Maybe I should be using a balun, coax, and a phone jack adapter as
> >suggested.
>
> Yes, very much if things are this touchy. You are trying to feed a
> high Z antenna into a low Z cable. Radio Shack has a very common
> BalUn product designed to take care of this very simply (and using
> common coaxial products they sell too).
> >
> >
> >No active amplification is used.
>
> That's fine, but by all of your accounts, you are on the thin edge.
>
> >For now, primary Teri can live with this.
>
> Hi Doug,
>
> Teri may be able to get along with it much more, if you realized you
> have two antennas in one and simply remove one of them. Simple, is
> easier said than simple.
>
> By all appearances you have a combination FM-TV antenna as I see at
> least 5 elements (you don't show the entire antenna by the way) and
> you are only using 3 of them. Your connection should be at the end
> that is pointing (east) at the station you want to hear. If it is
> not, you have it pointed backwards and this may explain why things are
> so hinky. Another clue that you can verify. There should be another
> set of antenna connections (like wing nuts that presently you connect
> to) at the OPPOSITE end of the boom - n'est pas? They should be on
> the next to last elements before the end of the boom.
>
> 73's
> Richard Clark, KB7QHC

Oh, dear. I opened

ftp://users.aol.com/DGoncz/Antenna/

to add to my post, closed the window, and lost the post.

Rewrite:

The antenna, a Radio Shack 15-2163 6-Element Triple Drive Outdoor FM Antenna, is an open dipole having a characterstic impedance near that of the twinaxial cable. That's how I selected the cable. I matched the inner conductors and insulation to those of the flexible open dipole supplied by the OEM. The twinaxial cable has slightly thicker conductors, but the insulation on both is polyethylene, not PVC, and the spacing is similar.

The connection is indeed at the east end.

The lead hangs straight down now, and is lashed to a coat hanger wire narrow V that steadies the antenna side to side, preventing contact with the ceiling. The weight of the cable steadies the antenna. I propose a length of chain to lower the antenna to above head height to get it below the upper sill, and weights to level and balance it. That way it will rotate left and right a total of 360 degrees for testing, although it will only have one stable position. The cup hook in the ceiling appear secure. I have a plastic screw shield to improve the cup hook mount. It's in there with wooden splints now. Not bad, but not a hard mount.

The cable is under the rug now, avoiding another trip, which damaged the phone plug. A 5C collet and closer will straighten the plug. A cat toy house protects the cable at the transition to the floor. Tasha likes to curl up in there. They both bat the cable once in a while.

Yours,

Doug Goncz
Replikon Research
Seven Corners, VA

2360. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 13:12:21 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040825091221.05775.00004198@mb-m05.aol.com>
Source record: 90381

>After satellites took over from hi-speed CW
>the Long Island operations ended and the acreage was given to the State of
>New
>York to be used as a State Park. However, the State wouldn't accept the
>property
>until all the antennas were removed at RCA's expense. This occurred in the
>late
>1970's. A group of my colleagues went out there to pick up souvenirs.
>
>Walt, W2DU

Thanks, very interesting. Looks like the Ocean Gate site is probably the last one with chance to be preserved. Rhombics farm is on the marshes, dept. of wildlife and fisheries took over that, but antennas are still there. We are trying to turn it into historical landmark and get the museum going at the building. Hopefully also home for Tesla RC and do some operating from there. Still a chance.

Yuri, K3BU

2361. Re: Preferred antenna location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 13:25:32 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040825092532.05775.00004199@mb-m05.aol.com>
Source record: 90382

>Other than locating an antenna as high as posible and in open space, are there

>"sweet spots" that behave like funnels for radio waves?
....
>Ron, W1WBV

There are.
I would group them into two huge groups: one, large geography, two, immediate surroundings.

Geography and ground conditions can focus or disperse radio waves as well as contribute to the formation of the antenna pattern. Example would be antennas on sloping hills, bluff on the shore of ocean.

Immediate surroundings can cause reflections and sweet spots. Example I came across was small loop next to the Beverage. It had better performance than either lone antenna, better S/N. Another contributor are the guy wires, surrounding towers and anything metallic. Easily seen with mobile setup.

Yuri, K3BU.us

2362. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 13:55:09 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10ip6fvs5mmi2b9@corp.supernews.com>
Source record: 90383

Dear Roy:
You have wondered about what the interest might be in the
application.

As you have accurately indicated, applications do sometimes undergo
extreme modification before one or more patents issue. Only the claims
in the issued patent constitute the meets-and-bounds of what is
protected.

However, comparing an application to the issued patent (or patents)
can be very revealing of the PTO's view of the subject matter. Insight
so gained can be of great help with further patent applications dealing
with similar subject matter.

In the days when it was not easy to compare applications with issued
patents, I had a case where a claim in an issued patent appeared to
encompass all archery targets having the appearance of an animal.
Paying to get a copy of the proceedings led to the conclusion that what
was actually protected were animal looking targets using two densities
of plastic! -- I have abbreviated the case --

The short answer is that one can (sometimes) learn from examining
the before and after.

To follow-up on another of your cogent observations: Design patents
protect the esthetic appearance of a useful article (and thus might not
be eligible for copyright protection) and their numbers start with a
"D." Plant patents have numbers that start with a "P."

Warm regards, Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10inso8ki3eih68@corp.supernews.com...
> I'm not sure what the interest might be in the application, if a
patent
> has been issued. Typically, an application undergoes modification --
> sometimes, extreme modification -- before the patent issues. And only
> the patent carries any prohibition about anyone making, using, or
> selling the item.
>
> The patent (6,677,914) is interesting in that it's a patent not for an
> antenna, or a method of tuning the antenna, but a system which
includes

> the antenna, a transmitter/receiver, and "means to coordinate the
means
> for adjusting the length of said conductive members to receive a
desired
> frequency used by said radio transmitter/receiver." To see exactly
what
> is patented, look up the patent at the USPTO's web site and read
claims
> 1 and 16. Those describe exactly what is patented -- the patented
system
> includes all the components in either claim. (The remaining claims are
> more restrictive, put there in case the less restrictive claims are
> deemed invalid in the future.) Only a system which includes all the
> components in a claim is covered under the patent, except for
> modifications "obvious to one skilled in the art".
>
> DISCLAIMER: I'm not an attorney, patent or otherwise. This is based on
> my limited and layman's knowledge of the law. Don't regard it as legal
> advice -- see a qualified patent attorney if you need real legal
advice.
>
> Roy Lewallen, W7EL
>
> J. McLaughlin wrote:
> > Dear Group:
> > One may see a patent application for the "SteppIR" antenna on
the
> > PTO's web site.
> >
> > Look for:
> > 20020171598 Tunable antenna system
> >
> > Punch in the above number here:
> > http://appft1.uspto.gov/netahtml/PTO/srchnum.html
> >
> > The application issued as patent 6,677,914.
> >
> > I can not remember if this has been posted. 73 Mac N8TT
> >
> > --
> > J. Mc Laughlin - Michigan USA
> > Home: JCM@Power-Net.Net
> >

2363. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 14:08:01 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <531Xc.2015$2B4.1479@trnddc06>
Source record: 90384

Hal

Yeah, the idea does work. I am using two 'side by side' RG223s right now
to evaluate a dipole antenna I'm playing with. For my purpose, the 70 ohm
dipole on the 100 ohm line is a good enough match.

Jerry

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:utUWc.18655$cx.3857@bignews4.bellsouth.net...
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:8ZPWc.2585$9P.466@trnddc04...
> > It may not be an answer to your question, but, 4 lengths of 75 ohm
coax
> > connected in series and parallel would result in 75 ohms, balanced.
Two
> 50
> > ohm coax cables "paralleled" could provide 100 ohms balanced with the
> center
> > conductors used as the balanced line.
> >
> > Jerry
>
> I posted the same answer in his 'found' thread - but I wasn't sure if my
> memory was in correct operating order. At least your post gives me hope
that
> my memory hasn't completely left me. :-)
>
> I've used that scheme to make matching sections a few years back. 75-ohm
> cable comes in handy a lot of times.
>
>
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/30/2004
>
>

2364. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 14:55:41 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <412ca527.524626125@news.galilei.com>
Source record: 90385

Hi Phil

As flat as Missouri is, my Creve Coeur home was in a virtual black hole. There was a microwave installation that blocked me to the northeast and several large steel buildings between my house and our local repeater to the east. But to the northwest, I had no trouble bringing up even the Columbia University repeater most days.

Since I'm new here, I'm not quite sure where Kingston is yet, but I'm quickly getting used to the fact that what I considered a LONG DRIVE in the St. Louis area, is just a SHORT HOP to the store here, hi hi.....
We'll have to get together for an eyeball one of these days!
I missed the local hamfest which I really wanted to attend and get to meet some faces.
Perhaps you can tell me where the local CANDY STORE is around these parts. That's part of the reason I'm not up and running yet! Need STUFF to get everything back up and on the air.

I enjoyed CW for umpteen years, it was my favorite! But then along come distractions (rug rats) and limited time and I finally switched over to voice where I could skedaddle quickly if need be.
I'm semi-retired, but often keep so busy, I wonder how I ever had time to work in the first place.

Plus, I didn't know if where I was living would be temporary or permanent. As of last friday I know it will be permanent, we bought the place! So, now I hope to get set up before winter, but there are many other more pressing issues to take care of now that we know we will be permanent residents at this location here in south Knoxville.

TTUL
Gary

2365. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 15:25:16 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <412CAF5C.2060308@psu.edu>
Source record: 90387

Yuri Blanarovich wrote:
>>After satellites took over from hi-speed CW
>>the Long Island operations ended and the acreage was given to the State of
>>New
>>York to be used as a State Park. However, the State wouldn't accept the
>>property
>>until all the antennas were removed at RCA's expense. This occurred in the
>>late
>>1970's. A group of my colleagues went out there to pick up souvenirs.
>>
>>Walt, W2DU
>
>
> Thanks, very interesting. Looks like the Ocean Gate site is probably the last
> one with chance to be preserved. Rhombics farm is on the marshes, dept. of
> wildlife and fisheries took over that, but antennas are still there. We are
> trying to turn it into historical landmark and get the museum going at the
> building. Hopefully also home for Tesla RC and do some operating from there.
> Still a chance.

Anything on the web about Ocean Gate, Yuri?

- mike KB3EIA -

2366. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 15:28:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <niapi09tsjn7m7c2vgvk4rnke4hk1jve8i@4ax.com>
Source record: 90386

On 25 Aug 2004 02:54:24 -0700, DGoncz@aol.com (Doug Goncz) wrote:

>The antenna, a Radio Shack 15-2163 6-Element Triple Drive Outdoor FM
>Antenna

Hi Doug,

I see nothing of twinax at all.

consult:
http://www.radioshack.com/images/ProductCatalog/Manuals/OME15-2163.pdf

However, you seem to have come to a working arrangement, twinax
doesn't make all that much difference, and it is pointed in the right
direction. I'm sure you are enjoying the music.

73's
Richard Clark, KB7QHC

2367. Re: 600-ohm Coax and antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 15:52:10 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <o6ydnX74Xcs3KLHcRVn-oA@comcast.com>
Source record: 90388

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cgh5nr$4ri$1@sparta.btinternet.com...
> It will be of interest that if the inner conductor of 600 ohm coax is 18
> gauge wire then the outer conductor diameter will be 22,000 times greater.
> ie., about 72 feet.
>

The connectors are going to cost a fortune!

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

2368. circular radiation!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 16:17:30 UTC
From: "aunwin@insightbb.com"
Message-ID: <uY2Xc.58420$Fg5.13735@attbi_s53>
Source record: 90389

I have just completed at least 50 hours of modelling a coil where an assembly was made of half coils and the relative positions of such were altered by raising or lowering the half coils which thus introduced vertical connecting pieces between the half coils. In addition to the above the half coils were wound CW and CCW in turn This arrangement was fed at the bottom in vertical style.
Unlike other modelling I took great care to ensure max use of segments together with the use of computor variable dimensions when seeking max radiation,impedance and all that.
What I found was as follows:
The phases of the current stayed relatively constant EXCEPT it consisted of two phases opposing each other.
The manipulation of the coil positions retarded rapid changes in impedance (I see this as a consequence of reducing reactive components that one has with a normal
coiled load)
No matter what changes I made(I never changed the diameter of the coil but did change the diameter of the coil wire e.t.c) I was never able to obtain characteristics of a normal whip.
From the above one can deduce that removal of reactance from a structure brings it closer to a dummy load.
On the question that I was fussing about i.e. dust generated as a dust cloud in straight and curved travel
represents losses per Newtons law of action and reaction.
the dust portraying the reactive forces to radiation.
So I found out for myself what everybody already had accepted as fact. So now another silly question which I only pose to myself..Interchange of energy between reactances are understood but what does overshoot of energy between reactances do, create heat or radiation?
The energy held by the overshoot is now of opposite phase to its original destination !
No I am not starting another thread, just explaining the modeling that I did in my relearning proces for all to share.
Regards
Art

2369. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 18:02:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ipl2bb5vg6p0a@corp.supernews.com>
Source record: 90390

Thanks very much for the information. It's added to my very imperfect and somewhat out of date knowledge of patent issues.

I've spent my share of time slogging through file wrappers to find out what claims had been rejected and why, to determine weak points in a patent and possible ways around it. Perhaps some of the readers of this group have similar interests!

Roy Lewallen, W7EL

J. McLaughlin wrote:

> Dear Roy:
> You have wondered about what the interest might be in the
> application.
>
> As you have accurately indicated, applications do sometimes undergo
> extreme modification before one or more patents issue. Only the claims
> in the issued patent constitute the meets-and-bounds of what is
> protected.
>
> However, comparing an application to the issued patent (or patents)
> can be very revealing of the PTO's view of the subject matter. Insight
> so gained can be of great help with further patent applications dealing
> with similar subject matter.
>
> In the days when it was not easy to compare applications with issued
> patents, I had a case where a claim in an issued patent appeared to
> encompass all archery targets having the appearance of an animal.
> Paying to get a copy of the proceedings led to the conclusion that what
> was actually protected were animal looking targets using two densities
> of plastic! -- I have abbreviated the case --
>
> The short answer is that one can (sometimes) learn from examining
> the before and after.
>
> To follow-up on another of your cogent observations: Design patents
> protect the esthetic appearance of a useful article (and thus might not
> be eligible for copyright protection) and their numbers start with a
> "D." Plant patents have numbers that start with a "P."
>
> Warm regards, Mac N8TT
> --
> J. Mc Laughlin - Michigan USA
> Home: JCM@Power-Net.Net

2370. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 18:17:00 UTC
From: uce@ftc.gov
Message-ID: <GY-dnTjULLg9SrHcRVn-pA@comcast.com>
Source record: 90391

Hello Gary,

I guess the best components store around here would be Shields. I'm pretty sure they have a web site. I usually order whatever I need from Mouser.

Kingston is about 20 miles west of Knoxville on I-40. Welcome to East TN, congrats on the acquisition, and I hope you have a high tolerance for orange. The locals get a little carried away with that around this time of year. I am originally from this area, but I have spent a lot of time living elsewhere. I guess I liked Memphis and KY best.

The Sevierville hamfest used to be (and may still be) one of the first ones of the year, and it was a pretty good one. Oak Ridge or Clinton also has a nice one. I believe Knoxville has a couple each year. I try to go to them when I am not working, but I work a really strange schedule. I imagine e-Bay has had a major impact on the hamfest business. I have been looking there for 222 MHz equipment with the idea of getting into meteor scatter on that band. I started out with an old TS-711 and an eleven element beam my dad got from Army Mars years ago and discovered high speed CW and meteor scatter, and things sort of grew from there. I now run a TS-2000X and deliver 1.5KW to four 9 element elevating yagis on 2 meters. I picked up my current callsign when I decided to get into EME since WB4KMH would be a bit much to use in such a difficult undertaking.

I hope you enjoy your time here in East TN. The weather usually isn't too harsh, and the mountains are very colorful in the fall. Hope we hear you on the air soon.

73, Phil - N1KI

Anti-spam measure to direct unwanted e-mail
to the FTC's unsolicited commercial e-mail address.

For direct reply, use my callsign in arrl.net
format or look me up on qrz.com

2371. Re: Linux Stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 18:23:42 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncipm9e.2bij.bit-bucket@shell.config.com>
Source record: 90392

On Tue, 24 Aug 2004 22:00:29 -0400, RCM hath writ:
> http://linuxshop.ru/linuxbegin/win-lin-soft-en/table.shtml
>
> Be sure to scroll down !!!!

TNX! As an OS/2 user, I am slowly migrating to linux (Mandrake.)
So, references such as this are always welcome.
But, I am concerned about: "Last update: 16.07.2003"

Here are several ham-centric, linux URL's from my konqureor
bookmarks:
http://radio.linux.org.au/
http://www.qsl.net/pg4i/
http://wa0eir.home.mchsi.com/

gl es 73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2372. Yo-Yo-Tenna's

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 18:40:38 UTC
From: artvandelah@hotmail.com
Message-ID: <49b89869.0408251040.593567b4@posting.google.com>
Source record: 90393

I noticed ALF Enterprises is selling the Yo-Yo-Tenna line of portable dipole antennas recently featured in QST, Worldradio, CQ, etc. at a little bit cheaper price and cheaper s&h than noted at the mfg's website. Being that most of us hams are frugal, I'd thought I'd spread the word. Here is that long webpage URL:

http://www.alfenterprises.com/amateur_radio/accessories/amateurbaseantennas.htm

73, Art

2373. Re: Linux Stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 18:58:24 UTC
From: AB2RC <AB2RC@localhost.localdomain>
Message-ID: <slrncipp13.mkl.AB2RC@homer.linux1.lan>
Source record: 90394

On 2004-08-25, Allodoxaphobia <bit-bucket@config.com> wrote:

> TNX! As an OS/2 user, I am slowly migrating to linux (Mandrake.)

here is another -- Mandrake & Ham --
http://www.n9nu.net/linux/linux.php

--
Alex / AB2RC
Yaesu FT100 software for Linux http://www.qsl.net/kc2ivl
You need only two tools: WD-40 and duct tape.
If it doesn't move and it should, use WD-40.
If it moves and shouldn't, use the duct tape.

2374. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 19:01:50 UTC
From: richardharrison@webtv.net
Message-ID: <8736-412CE21E-64@storefull-3255.bay.webtv.net>
Source record: 90396

Yuri, K3BU wrote:
"If anyone cares to discuss the subject, or, explain how the conductor laid on the ground can lose its conductivity, bring it on."

My observations on Tom, W8Ji`s antics are similar to Yuri`s. Too bad because Tom has much to offer. We all make mistakes, and for everyone`s benefit we should admit we are wrong when it happens.

The loss from an r-f conductor near the earth is likely more from displacement (dielectric) loss than conductor conductivity. At Radio Free Europe we found it more economical to build a kneehigh 2-wire 600-ohm transmission line of Copperweld than to build a stainless steel dissipation lline high above the ground to dissipate 50 KW. It worked very well but it was a collision hazard.

Best regards, Richard Harrison, KB5WZI

2375. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 19:03:55 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040825150355.21423.00001872@mb-m18.aol.com>
Source record: 90395

```
>
>
> Anything on the web about Ocean Gate, Yuri?
>
> - mike KB3EIA -
>
>
>
>
>
```

Yep,
http://mailman.qth.net/pipermail/oceangate/
wanna join Tesla RC and help?

Yuri, K3BU.us

2376. Re: Linux Stuff

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 19:27:28 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncipq10.1tmv.bit-bucket@shell.config.com>
Source record: 90397

On Wed, 25 Aug 2004 18:58:24 GMT, AB2RC hath writ:
> On 2004-08-25, Allodoxaphobia <bit-bucket@config.com> wrote:
>
>> TNX! As an OS/2 user, I am slowly migrating to linux (Mandrake.)
>
> here is another -- Mandrake & Ham --
> http://www.n9nu.net/linux/linux.php

Oh, wow! Great! Thanks!! Now the rest of my day is shot. HI!HI!

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2377. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 19:43:07 UTC
From: "aunwin@insightbb.com"
Message-ID: <fZ5Xc.314673$%_6.241085@attbi_s01>
Source record: 90398

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:8736-412CE21E-64@storefull-3255.bay.webtv.net...
> Yuri, K3BU wrote:
> "If anyone cares to discuss the subject, or, explain how the conductor
> laid on the ground can lose its conductivity, bring it on."
>
> My observations on Tom, W8Ji`s antics are similar to Yuri`s. Too bad
> because Tom has much to offer. We all make mistakes, and for everyone`s
> benefit we should admit we are wrong when it happens.
>
What did he say that was wrong ?
What book this time are you quoting from?
What book states that you are correct in your own analysis?
We all know that you have some sort of connection with Radio Free Europe so
how did your antics prove
that Tom is in error? Yes Tom and others including myself can be
fraustrating but is that justification for dragging him thru the mud? Your
post sounds like a "swift boat"
advertisement so maybe some of it will stick
Art

> The loss from an r-f conductor near the earth is likely more from
> displacement (dielectric) loss than conductor conductivity. At Radio
> Free Europe we found it more economical to build a kneehigh 2-wire
> 600-ohm transmission line of Copperweld than to build a stainless steel
> dissipation lline high above the ground to dissipate 50 KW. It worked
> very well but it was a collision hazard.
>
> Best regards, Richard Harrison, KB5WZI
>

2378. Re: 600-ohm Coax and antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 20:34:36 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <wJ6Xc.91124$TI1.14614@attbi_s52>
Source record: 90399

Dave VanHorn wrote:
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cgh5nr$4ri$1@sparta.btinternet.com...
>
>>It will be of interest that if the inner conductor of 600 ohm coax is 18
>>gauge wire then the outer conductor diameter will be 22,000 times greater.
>>ie., about 72 feet.
>>
>
>
> The connectors are going to cost a fortune!

And then, think about soldering or crimping!! <grin>
>

2379. fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 21:08:32 UTC
From: Angela & Gary <gmbelcas@charter.net>
Message-ID: <gmbelcas-296C03.14083225082004@comcast.dca.giganews.com>
Source record: 90400

I am in need of 3 short lengths (10-12") of 1" diameter fiberglass rod and I cannot find any locally. Anybody have some left-over pieces that they might sell?? Tnx in advance.

Gary

2380. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 21:30:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <051qi0d7vq5tsgotimuqpqk7r5923qbb2c@4ax.com>
Source record: 90401

On Wed, 25 Aug 2004 19:43:07 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
> so maybe some of it will stick
more trolling

2381. Re: fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 21:39:08 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <cm1qi09deulsa2eah4bv0odv9fonddsalf@4ax.com>
Source record: 90402

On Wed, 25 Aug 2004 14:08:32 -0700, Angela & Gary
<gmbelcas@charter.net> wrote:

>I am in need of 3 short lengths (10-12") of 1" diameter fiberglass rod
>and I cannot find any locally. Anybody have some left-over pieces that
>they might sell?? Tnx in advance.
>
>Gary

If you don't find scrap, try www.mcmaster.com

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2382. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 21:53:02 UTC
From: "aunwin@insightbb.com"
Message-ID: <2T7Xc.46022$9d6.21717@attbi_s54>
Source record: 90403

If I was going to join the trashing then at the least I would go to EHAM and tell him why he is wrong. It just doesn't belong here on this group, it belongs on the group where he made the statement.
I suspect that you soon will add snide remarks for which
you have s remarkable ability that has stood the test of time.on R.R.A.A.
Art

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:051qi0d7vq5tsgotimuqpqk7r5923qbb2c@4ax.com...
> On Wed, 25 Aug 2004 19:43:07 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
> > so maybe some of it will stick
> more trolling

2383. Re: fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 21:56:36 UTC
From: "aunwin@insightbb.com"
Message-ID: <oW7Xc.46036$9d6.39405@attbi_s54>
Source record: 90404

I have only seen that diameter on guys for power poles.
At least that is one scrapyard to look for
Art
"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-296C03.14083225082004@comcast.dca.giganews.com...
>
> I am in need of 3 short lengths (10-12") of 1" diameter fiberglass rod
> and I cannot find any locally. Anybody have some left-over pieces that
> they might sell?? Tnx in advance.
>
> Gary

2384. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 22:36:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h05qi05ved2ifjq2fkela08dm7lte37sja@4ax.com>
Source record: 90405

On Wed, 25 Aug 2004 21:53:02 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
> I suspect that you
more trolling

2385. Copper Clear Coating Options

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 22:57:43 UTC
From: Drink <drink@gnt.net>
Message-ID: <cgj5dnnek1@news.utelfla.com>
Source record: 90406

Hi All,
I recently made a Moxon rectangle for 2 meters and used 1/2 inch copper tubing for the elements. When finished, I polished the tubing and coated it with a clear coat acrylic. It's a true work of art with shiny copper, stained oak and brass screws for fixing but the acrylic is so brittle that I can simply scrape it off with my thumb nail.
Is there another clear coat I can use that will be much stronger? Polyurethane? Some form of epoxy? Or, does acrylic have some property that doesn't affect/interfere/interact with RF?
Best Regards,
Jim, WP3JQ

2386. Re: circular radiation!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 23:20:50 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <J89Xc.19169$N11.7664@bignews5.bellsouth.net>
Source record: 90407

I think the opposing coils caused a temporal rift in the space-time
continuim - because I would swear I've seen this subject before - or is it
deja-vue?

"aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in message
news:uY2Xc.58420$Fg5.13735@attbi_s53...
> I have just completed at least 50 hours of modelling a coil where an
> assembly was made of half coils and the relative positions of such were
> altered by raising or lowering the half coils which thus introduced
vertical
> connecting pieces between the half coils. In addition to the above the
half
> coils were wound CW and CCW in turn This arrangement was fed at the bottom
> in vertical style.
> Unlike other modelling I took great care to ensure max use of segments
> together with the use of computor variable dimensions when seeking max
> radiation,impedance and all that.
> What I found was as follows:
> The phases of the current stayed relatively constant EXCEPT it consisted
of
> two phases opposing each other.
> The manipulation of the coil positions retarded rapid changes in impedance
> (I see this as a consequence of reducing reactive components that one has
> with a normal
> coiled load)
> No matter what changes I made(I never changed the diameter of the coil
but
> did change the diameter of the coil wire e.t.c) I was never able to obtain
> characteristics of a normal whip.
> From the above one can deduce that removal of reactance from a structure
> brings it closer to a dummy load.
> On the question that I was fussing about i.e. dust generated as a dust
cloud
> in straight and curved travel
> represents losses per Newtons law of action and reaction.
> the dust portraying the reactive forces to radiation.
> So I found out for myself what everybody already had accepted as fact. So
> now another silly question which I only pose to myself..Interchange of
> energy between reactances are understood but what does overshoot of energy
> between reactances do, create heat or radiation?
> The energy held by the overshoot is now of opposite phase to its original
> destination !
> No I am not starting another thread, just explaining the modeling that I
did

> in my relearning proces for all to share.
> Regards
> Art
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2387. Re: Found - Source for 72 Ohm Transmission Line

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 23:36:58 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <Rn9Xc.19256$N11.14031@bignews5.bellsouth.net>
Source record: 90408

> Twinlead, ladder line, and other symmetrical lines are often called
> "balanced" lines -- as you've done here. But it's important to realize
> that there's nothing about these lines that causes the currents on the
> lines to be equal and opposite (or "balanced"). Imbalanced currents
> cause feedline radiation. Symmetrical lines can be unbalanced, and coax
> can be balanced. To learn a little more about this, see "Baluns: What
> They Do and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1.
>
> Roy Lewallen, W7EL

You are correct - as usual - so - if the transmission line (up to the point
of connection to that conglomeration) was carrying a balanced current (
equal in voltage and opposite in polarity at corresponding points) - then
the aforementioned line could continue to assist with the migration of
electrons along the path of conductance in a balanced manner.
;-)
that's why a half-wave of coax can be used at a particular freq as a 4-to-1
balun - where the braid is 'left behind' but the current continues with the
voltage doubled - thus quadrupling the impedence matching ability... ...
and all that stuff

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2388. ANTENNA TWINLEAD FEEDER

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 23:44:36 UTC
From: folio <ve2lxNOSPAM@sympatico.ca>
Message-ID: <Fv9Xc.22349$DG.1106859@news20.bellglobal.com>
Source record: 90409

hello to all
from Gilles ve2lx

1 st past ever on this group

I just install temporary an invert dipole feeded with tv twinlead 300 ohm

actually I have no RF interferences from 160 to 12 m (but only low on 10 m but no more usable anyway) compare to my end fed I had 2 month ago...!

antenna length is 66 ft or 33 ft each side and feeder length about 48 ft...the dipole is parralele to the back of the 20 appartement's house and the full SFC remote coupler or tuner (builted only for wire tuning) is on my back galery 8 ft from radio on 3 rd floor a little above hand rail...!

(((......I found 75 ohm twin lead......)))

and (I would like to use it instead) for10 to 80 and 160 m (actually I do it with 300 ohm twin lead accepting low efficiency on 160 m and perhaps on 80 m but it is ok.

my target
1...is to have as much efficiency as I can for all bands use primaly on 40 and 20 m (reason for 66 ft)
2...at 75 ohm on 80 meter there will be much less SWR (like 1/30: OR MORE WITH 300 OHM on 80 m) due to unmatch compare to 300 ohm
3...there will be better energy transfer because dipole is + or - 75 ohms and feeder also and the tuner will search less value to match then therefore les chance of RF problem radiations form feeder (les larger) and so on
4...feeder length will have less effect at 75 ohm on a all bands consideration...?

is this thinking correct

wishing to ear from amateurs with good experience with balance or twin lead feeder

---
Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19

2389. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-25 23:58:01 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <zH9Xc.19372$N11.10884@bignews5.bellsouth.net>
Source record: 90410

> Hal
>
> Yeah, the idea does work. I am using two 'side by side' RG223s right
now
> to evaluate a dipole antenna I'm playing with. For my purpose, the 70 ohm
> dipole on the 100 ohm line is a good enough match.
>
> Jerry

and as Roy pointed out in the other thread - the assembly will just
facilitate the transmission of a balanced load - not 'cause it' to be
balanced -
But as you pointed out - using such an assembly aids in impedence matching
schemes - and if the line happens to be balanced - it won't tip over . ;-)

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2390. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:05:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <GO9Xc.19414$N11.6759@bignews5.bellsouth.net>
Source record: 90411

This is interesting. Are the negative effects due to the fact that induced magnetism will persist, and thus set up additional impedence on the line ? and does this skin effect caused by the magnetism vary significantly with frequency ?

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10in6sgj5tpg535@corp.supernews.com...
> You've gotten a lot of conflicting advice. Let me add mine.
>
> Without going through the numbers in detail, Paul, OH3LWR's analysis
> looks sound. However, he neglected one factor. The skin depth is also
> inversely proportional to the square root of the permeability. Some
> stainless steels are ferromagnetic, with a permeability I'd guess at 100
> or more. That reduces the skin depth, and therefore increases the RF
> resistance, by at least a factor of 10. If you do the analysis with
> realistic numbers, you'll find that loss can become at least several dB
> if the wire is magnetic, and worse with longer (40 or 80 meter) dipole
> lengths.
>
> So my recommendation is to check the wire with a magnet. If it's
> magnetic, expect longer antennas to be quiet and broadband (which
> amateurs crave) but lossy (which most don't seem to care about).
> Non-magnetic stainless isn't likely to produce objectionable loss,
> except perhaps at an 80 meter dipole length or longer.
>
> You can get a qualitative feel for the loss by comparing the 2:1 SWR
> bandwidth of an antenna made from the wire with the bandwidth from a
> dipole made from copper wire. The broader it is, the lossier it is.
>
> Roy Lewallen, W7EL
>
> Dave wrote:
> > I recently acquired a large quantity of very flexible stranded
> > stainless steel wire at a garage sale. It is about 0.85 mm (around
> > 1/32 inch) in diameter and extremely strong. I was wondering if this
> > could be used for wire antennas for HF. I seem to remember seeing
> > something about SS not being ideal. Is this a real consideration or
> > just a matter of being too finiky?
> >
> > Thanks - Dave

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2391. test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:13:03 UTC
From: Jim NN7K <NN7KexNOSPAMK7ZFG@sbcglobal.net>
Message-ID: <jW9Xc.8157$QJ3.3908@newssvr21.news.prodigy.com>
Source record: 90412

test 7

2392. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:18:45 UTC
From: k9sqg@aol.com
Message-ID: <20040825201845.18203.00002099@mb-m03.aol.com>
Source record: 90413

I used PVC improvised standoffs for my shunt fed tower.

2393. Re: Copper Clear Coating Options

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:19:59 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgjabfdsl1@hercules.btinternet.com>
Source record: 90414

Try relatively clear ship's varnish or what is sold as such. It's designed
for harsh weather protection and has no effect on antenna performance. I
have used the stuff on copper magloops. Keeps a nice appearance for ages.

Reg

==========

"Drink" <drink@gnt.net> wrote in message
news:cgj5dnnek1@news.utelfla.com...
> Hi All,
> I recently made a Moxon rectangle for 2 meters and used 1/2 inch copper
> tubing for the elements. When finished, I polished the tubing and coated
it
> with a clear coat acrylic. It's a true work of art with shiny copper,
> stained oak and brass screws for fixing but the acrylic is so brittle that
I
> can simply scrape it off with my thumb nail.
> Is there another clear coat I can use that will be much stronger?
> Polyurethane? Some form of epoxy? Or, does acrylic have some property
that
> doesn't affect/interfere/interact with RF?
> Best Regards,
> Jim, WP3JQ
>
>

2394. Re: circular radiation!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:33:08 UTC
From: "aunwin@insightbb.com"
Message-ID: <8daXc.62087$Fg5.8643@attbi_s53>
Source record: 90415

I really do not know Hal as it all was a surprise to me.
I wanted to believe that the lack of phase change would keep radiation at a peak without thinking of a possible constant weak radiation. It also surprised me that there appeared no current curve that one associates with a whip which makes one wonder about the cancellation of reactances along a radiator and leaving just resistance.
Proff Underhill stated last month in RADCOM (U.K.) that a lot about loops is unknown which I find obvious as some in this group view mutual coupling as following the same rules of very close coupling not realising that the inductance inside a coil is a world of difference to that from coupling outside of the coil. One esteemed member of this group stated that there is no mechanical pump type thing in radiation when I pointed out the function of a loop/phase change action in the combination loop dipole arrangement. I sure hope that the experimentors of tomorrow are not discouraged by those who are prisoners of yesterday
Regards
Art
"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:J89Xc.19169$N11.7664@bignews5.bellsouth.net...
> I think the opposing coils caused a temporal rift in the space-time
> continuim - because I would swear I've seen this subject before - or is it
> deja-vue?
>
> "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote in
message
> news:uY2Xc.58420$Fg5.13735@attbi_s53...
> > I have just completed at least 50 hours of modelling a coil where an
> > assembly was made of half coils and the relative positions of such were
> > altered by raising or lowering the half coils which thus introduced
> vertical
> > connecting pieces between the half coils. In addition to the above the
> half
> > coils were wound CW and CCW in turn This arrangement was fed at the
bottom
> > in vertical style.
> > Unlike other modelling I took great care to ensure max use of segments
> > together with the use of computor variable dimensions when seeking max
> > radiation,impedance and all that.
> > What I found was as follows:
> > The phases of the current stayed relatively constant EXCEPT it consisted
> of
> > two phases opposing each other.
> > The manipulation of the coil positions retarded rapid changes in
impedance

> > (I see this as a consequence of reducing reactive components that one
has
> > with a normal
> > coiled load)
> > No matter what changes I made(I never changed the diameter of the coil
> but
> > did change the diameter of the coil wire e.t.c) I was never able to
obtain
> > characteristics of a normal whip.
> > From the above one can deduce that removal of reactance from a structure
> > brings it closer to a dummy load.
> > On the question that I was fussing about i.e. dust generated as a dust
> cloud
> > in straight and curved travel
> > represents losses per Newtons law of action and reaction.
> > the dust portraying the reactive forces to radiation.
> > So I found out for myself what everybody already had accepted as fact.
So
> > now another silly question which I only pose to myself..Interchange of
> > energy between reactances are understood but what does overshoot of
energy
> > between reactances do, create heat or radiation?
> > The energy held by the overshoot is now of opposite phase to its
original
> > destination !
> > No I am not starting another thread, just explaining the modeling that I
> did
> > in my relearning proces for all to share.
> > Regards
> > Art
> >
> >
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>
>

2395.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:40:28 UTC
From: Jim NN7K <NN7KexNOSPAMK7ZFG@sbcglobal.net>
Message-ID: <0kaXc.8163$QJ3.4844@newssvr21.news.prodigy.com>
Source record: 90416

test

2396. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:42:03 UTC
From: DGoncz@aol.com
Message-ID: <5d8971ea.0408251642.2a1b7364@posting.google.com>
Source record: 90417

Dear Richard,

The Radio Shack manual linked below, which I have, and came with the antenna, doesn't mention twiaxial cable because no twinaxial cable with an impedance of 75 ohms is available at a reasonable price, so people use 75 ohm cable because it's cheaper. If I could get 75 ohm twinaxial cable I'd use it.

The impedance of this and every open dipole antenna is around 75 ohms, one quarter of the impedance of a 300 ohm folded dipole, just about ten percent from the impedance of empty space. We are in an atmosphere....

However, the OEM antenna is a flexible _open_ dipole with a characterstic impedance of 75 ohms. I think 100 ohm twinax is a good choice.

Can any readers source 75 ohm twinax?

Doug

Richard Clark <kb7qhc@comcast.net> wrote in message news:<niapi09tsjn7m7c2vgvk4rnke4hk1jve8i@4ax.com>...
> On 25 Aug 2004 02:54:24 -0700, DGoncz@aol.com (Doug Goncz) wrote:
>
> >The antenna, a Radio Shack 15-2163 6-Element Triple Drive Outdoor FM
> >Antenna
>
> Hi Doug,
>
> I see nothing of twinax at all.
>
> consult:
> http://www.radioshack.com/images/ProductCatalog/Manuals/OME15-2163.pdf
>
> However, you seem to have come to a working arrangement, twinax
> doesn't make all that much difference, and it is pointed in the right
> direction. I'm sure you are enjoying the music.
>
> 73's
> Richard Clark, KB7QHC

2397. hope last test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 00:43:04 UTC
From: NN7Kex NOSPAM k7zfg <"NN7Kex NOSPAM k7zfg"@sbcglobal.net>
Message-ID: <smaXc.8165$QJ3.977@newssvr21.news.prodigy.com>
Source record: 90418

ww

2398. Re: hope last test US TOO!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 01:05:41 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10iqdr9169q1o64@corp.supernews.com>
Source record: 90419

NN7Kex NOSPAM k7zfg wrote:

> ww

2399. Re: hope last test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 01:07:10 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <plaXc.19867$N11.9274@bignews5.bellsouth.net>
Source record: 90420

your newsgroup antenna is working

"NN7Kex NOSPAM k7zfg" <"NN7Kex NOSPAM k7zfg"@sbcglobal.net> wrote in message
news:smaXc.8165$QJ3.977@newssvr21.news.prodigy.com...
> ww

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2400. Re: hope last test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 01:44:17 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <RfbXc.8177$QJ3.7211@newssvr21.news.prodigy.com>
Source record: 90321

Hal Rosser wrote:

> your newsgroup antenna is working
>
> "NN7Kex NOSPAM k7zfg" <"NN7Kex NOSPAM k7zfg"@sbcglobal.net> wrote in message
> news:smaXc.8165$QJ3.977@newssvr21.news.prodigy.com...
>
>>ww
>
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>
>

Yeh, trying to "hide" address from spam robots,
yet be intelligible to a "HUMAN" for a reply-- think itpretty much
there-- Jim NN7K

2401. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 01:49:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iqgdlb1nr26a8@corp.supernews.com>
Source record: 90322

Hal Rosser wrote:

> This is interesting. Are the negative effects due to the fact that induced
> magnetism will persist, and thus set up additional impedence on the line ?

Not if I understand you correctly. The effect I'm describing isn't an impedance due to inductance, as you seem to imply. It's that the density of an AC current decays exponentially from the surface downward into a conductor, increasing the resistance of that conductor (known as skin effect). The skin depth is a measure of how rapidly it decays and therefore how resistive a conductor will be, and the skin depth is a function of the frequency, the DC conductivity of the material, and its permeability. I'm sorry I'm not able to explain why increased permeability decreases the skin depth except that it's due to the increased magnetic field opposing current into the conductor (which might be what you tried to say). I'm sure you can find a lot about skin effect on the web, as well as in any electromagnetics text.

> and does this skin effect caused by the magnetism vary significantly with
> frequency ?

I honestly don't know the answer to this. The permeability of ferromagnetic materials does vary with frequency, in what appears to be an unpredictable way. Whether this value or the DC permeability should be used for calculation, I don't know. I suspect that the DC permeability should be used, and the permeability change with frequency regarded as a change in effective permeability -- but I don't know for sure. I'd really appreciate it if anyone who does know would comment. Of course, skin depth varies with frequency even if the permeability is constant.

Roy Lewallen, W7EL

2402. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 01:56:11 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%qbXc.484$yP4.182@trnddc08>
Source record: 90323

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:zH9Xc.19372$N11.10884@bignews5.bellsouth.net...
> > Hal
> >
> > Yeah, the idea does work. I am using two 'side by side' RG223s right
> now
> > to evaluate a dipole antenna I'm playing with. For my purpose, the 70
ohm
> > dipole on the 100 ohm line is a good enough match.
> >
> > Jerry
>
> and as Roy pointed out in the other thread - the assembly will just
> facilitate the transmission of a balanced load - not 'cause it' to be
> balanced -
> But as you pointed out - using such an assembly aids in impedence matching
> schemes - and if the line happens to be balanced - it won't tip over .
;-)

And -- Use of a balanced line to feed a ballanced antenna allows a balun
to be located where it may be of a lesser disturbance when it is not a
perfect balun.

Jerry

2403. QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:22:22 UTC
From: pdrunen@aol.com
Message-ID: <20040825232222.23951.00004464@mb-m28.aol.com>
Source record: 90324

Hi Group,

I like the halo antenna for 6 meters in this months QST. Can anyone tell me what the input impedance would be if the halo was directly connected to the coax?

How about the same concept with the antenna as a square?

de KJ4UO

2404. Direct TV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:25:24 UTC
From: pdrunen@aol.com
Message-ID: <20040825232524.23951.00004466@mb-m28.aol.com>
Source record: 90325

Hi Group,

I am starting to see the RCA's direct TV disk showing up for a fair price at garage sales. I have picked up about 3 of them so far.

What I have learned on the internet is that the sates are around 12GHz and the down conversion is about 1 GHz.

I recall a ham band around 10GHz and wander if anyone is doing work with them on the ham bands?

How much gain would this antenna get at 12GHz. I believe the diameter is about 19 or so inches.

Thanks!

de KJ4UO

2405. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:27:17 UTC
From: richardharrison@webtv.net
Message-ID: <8847-412D5895-24@storefull-3252.bay.webtv.net>
Source record: 90327

Art Unwin wrote:
"What did he say that was wrong?"

Recently Tom argued with Yuri that loading coils must have the same current in and out. Circuit theory does not directly apply in all cases due to the possibility of a reflected wave on the coil and due to radiation from a loading coil.

Did Tom ever admit that it`s possible that current into one end of the coil does not necessarily equal the current at its other end?

Best regards, Richard Harrison, KB5WZI

2406. Re: Attention: BCB-AM DX'ers

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:30:16 UTC
From: CW <"no adddress"@spam>
Message-ID: <edKdnaJ3ntvUxLDcRVn-tg@comcast.com>
Source record: 90326

Temperary tax means "we'll stop collecting it when the world comes to an
end".

"Karl Beckman" <Karl.Beckman@motorola.com> wrote in message
news:cfvp2d$6m4$1@engnntp1.cig.mot.com...
> I recall that postcards had "just gone up" to 2 cents when I started
> kindegarten in 1954. Same time frame that Ohio started their temporary
> sales tax of 1%, which is up to 8% now but still "temporary."
>
> --
> Karl Beckman, P.E.
> Motorola CGISS
>
> "Quality is never an accident, it is always the result of high
> intention, sincere effort, intelligent direction and skillful
> execution; it represents the wise choice of many alternatives"
>
> --
>
>
>
> "J. McLaughlin" <JCM@Power-Net.Net> wrote in message
> news:10i56fiatdl1sd2@corp.supernews.com...
> > Dear Butch and Cecil;
> > It is good to get confirmation of such events from long ago.
> > Somehow, I also associate the year that it happened as being the year
> > when a postal card went from one cent to two cents. The new postal card
> > had a red square "stamp."
> > Anyone remember what year that would have been?
> > Oh. Even then, I was keen on antennas and radio. 73 Mac N8TT
> >
> > --
> > J. Mc Laughlin - Michigan USA
> > Home: JCM@Power-Net.Net
> > "Butch" <lynyrd@cableone.net> wrote in message
> > news:10i4mua1mdvk004@corp.supernews.com...
> > > I remember too Mac, and they did taste better!
> > >
> > > Butch KF5DE
> > >
> > > J. McLaughlin wrote:
> > >
> > > > ... and I can remember when a coke went from a nickel to a dime.
> > Tasted

> > > > better then too. 73 Mac N8TT
> > > >
> > > > --
> > > > J. Mc Laughlin - Michigan USA
> > > > Home: JCM@Power-Net.Net
> > > >
> > >
> >
>
>

2407. Re: Copper Clear Coating Options

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:36:46 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040825233646.04845.00002560@mb-m24.aol.com>
Source record: 90328

>Is there another clear coat I can use that will be much stronger?

Marine paints, epoxy paints, or if you want better radiation, black latex drive coating stuff. Had bamboo poles coated with it, lasts forever (almost).

Yuri, K3BU.us

2408. Re: Direct TV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:54:46 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <aadXc.143$Jj1.12@trnddc01>
Source record: 90329

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20040825232524.23951.00004466@mb-m28.aol.com...
> Hi Group,
>
> I am starting to see the RCA's direct TV disk showing up for a fair price
at
> garage sales. I have picked up about 3 of them so far.
>
> What I have learned on the internet is that the sates are around 12GHz and
the
> down conversion is about 1 GHz.
>
> I recall a ham band around 10GHz and wander if anyone is doing work with
them
> on the ham bands?
>
> How much gain would this antenna get at 12GHz. I believe the diameter is
about
> 19 or so inches.
>
> Thanks!
>
> de KJ4UO

Do a search under W1GHZ. Paul's site is exhaustive on parabolic relfectors
and proper feed illumination.
Dale W4OP

2409. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 03:56:39 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <XbdXc.144$Jj1.85@trnddc01>
Source record: 90330

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20040825232222.23951.00004464@mb-m28.aol.com...
> Hi Group,
>
> I like the halo antenna for 6 meters in this months QST. Can anyone tell
me
> what the input impedance would be if the halo was directly connected to
the
> coax?
>
> How about the same concept with the antenna as a square?
>
> de KJ4UO

Shape has a very minor effect on the radiation resistance. Shortened 1/2
wave loops have a radiation resistance typically in the 10-12 Ohm region.
The halo has an elliptical (about 3dB out of "omni") and care must be taken
to choke off radiation currents on the feedline and support mast.

Dale W4OP

2410. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 04:29:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iqpomht4qdq46@corp.supernews.com>
Source record: 90331

Do you have a quote showing exactly what Tom said, in context?

Roy Lewallen, W7EL

Richard Harrison wrote:

> Art Unwin wrote:
> "What did he say that was wrong?"
>
> Recently Tom argued with Yuri that loading coils must have the same
> current in and out. Circuit theory does not directly apply in all cases
> due to the possibility of a reflected wave on the coil and due to
> radiation from a loading coil.
>
> Did Tom ever admit that it`s possible that current into one end of the
> coil does not necessarily equal the current at its other end?
>
> Best regards, Richard Harrison, KB5WZI
>

2411. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 04:39:52 UTC
From: "aunwin@insightbb.com"
Message-ID: <oQdXc.312131$a24.43563@attbi_s03>
Source record: 90332

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:8847-412D5895-24@storefull-3252.bay.webtv.net...
> Art Unwin wrote:
> "What did he say that was wrong?"

I said more than that!, Ae you cherry picking again?
You did not prove your case against Tom in your allegation, period
Now you scurried away to something else without justifying that your
original
is correct and Tom is wrong!
Climbing towers to tighten nuts under direction does
not make you an antenna expert where as Tom has proved himself
amoung the amateur community time over time.

>
> Recently Tom argued with Yuri that loading coils must have the same
> current in and out. Circuit theory does not directly apply in all cases
> due to the possibility of a reflected wave on the coil and due to
> radiation from a loading coil.
>
> Did Tom ever admit that it`s possible that current into one end of the
> coil does not necessarily equal the current at its other end?

I haven't seen a posting from Tom on this newsgroup for a very long time.
Did you confront him to his face about this or are you talking about him in
his absence?
Go to EHAM and confront him like a man especially if this original
confrontation
occured else where. Ifyou have a problem with some one about something then
talk to him directly
instead of throwing mud when he isn't looking. There have been many
statements made about Tom lately
that I can't verify in RRAA records so why are you bringing mud to this
table especially
when the target is not here to defend himself and especially if your
charges are scurrilous
and without depth

Art
>
> Best regards, Richard Harrison, KB5WZI
>

2412. Stainless steel antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 04:58:14 UTC
From: Larry Benko <xxw0qe@comcast.net>
Message-ID: <CvCdncgWXJp18LDcRVn-iw@comcast.com>
Source record: 90333

Since this topic has been recently discussed, I was wondering how well EZNEC (ver. 4+ here) would model a wire antenna made with stainless steel wire. The "Wire Loss" table in EZNEC allows a User Defined Resistivity and Relative Permeability. Would the fact that SS wire is usually comprised of a very large number of strands has any appreciable effect on the loss? Assuming that EZNEC can do the modeling correctly, what would be approximate values to use for the resistivity and relative permeability? I did a quick measurement in a short piece of SS stranded wire measured a DC resistance (with a 4 wire ohmmeter) of ~50 times that of copper.

Thanks and 73,
Larry Benko, W0QE

2413. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 05:11:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iqs873im4l29f@corp.supernews.com>
Source record: 90334

I have a great deal of respect for Tom, W8JI. In fact, there are few people I respect as much. I regard him as being exceptionally honest, very analytical, and always seeking to find the truth and increase his knowledge. Whenever his view of how things work have been shown to be wrong, I've found him to readily accept the corrected view, and be grateful of the opportunity to learn something new. I've also learned from him on more than one occasion. One notable case is the idea of using a balun at the input of a tuner to improve the balun's balancing properties. I had believed it to work, but he showed me where I was wrong, giving me the opportunity to increase my knowledge.

I find it contemptable and cowardly to attack him -- or anyone -- in a forum where he's not a participant and isn't present to correct misquotes, quotes taken out of context, and otherwise respond and defend himself. People doing so should instead sign onto one of the election campaigns or go on AM talk radio, where such gutless, dishonest, and mean-spirited activity is the accepted norm.

I believe the Russians have a word for this kind of cowardly and "uncultured" activity -- something like "nyekulturny". Maybe Yuri knows.

Roy Lewallen, W7EL

2414. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 05:36:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sitqi0h3rmqh17br533dqv4dp9jn8fhirn@4ax.com>
Source record: 90335

On Wed, 25 Aug 2004 14:01:50 -0500, richardharrison@webtv.net (Richard Harrison) wrote:
>Tom has much to offer.

On Thu, 26 Aug 2004 04:39:52 GMT, "aunwin@insightbb.com" <aunwin@insightbb.com@insightbb.com> wrote:
>You did not prove your case against Tom in your allegation, period

more trolling

2415. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 05:39:37 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412d790c$1_2@corp.newsgroups.com>
Source record: 90336

Richard Harrison wrote:
> Did Tom ever admit that it`s possible that current into one end of the
> coil does not necessarily equal the current at its other end?

His own measurements proved that the currents at each end of
air-core loading coils are NOT equal.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2416. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 05:54:05 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412d7c71_2@corp.newsgroups.com>
Source record: 90338

Roy Lewallen wrote:
> Do you have a quote showing exactly what Tom said, in context?

Here's one from his web page:

"What determines current distribution in a loading coil? The capacitance
to the outside world and the impedance above the loading coil. The current
in any inductor would be equal at each end except for displacement currents,
which are "imaginary currents" that flow through capacitance."

He completely ignores the fact that, for a standing-wave antenna, the net
current is the superposed phasor sum of the forward current and reflected
current and whatever phase shift occurs through the coil is doubled because
those two currents are traveling in opposite directions.

He is thinking lumped circuit model when he should be using a distributed
network model. What he says is reasonably accurate for a traveling-wave
antenna but certainly not for a standing-wave antenna.

EZNEC clearly illustrates the difference in the currents when the coil is
modeled as a coil of wire segments and not as a lumped inductor. Anyone who
would like a copy of the EZNEC file need only request it.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2417. Re: Stainless steel antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 05:59:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <75uqi019717cjvic7gol4j0ak6eqkfagp1@4ax.com>
Source record: 90337

On Wed, 25 Aug 2004 22:58:14 -0600, Larry Benko <xxw0qe@comcast.net>
wrote:

> Would the fact that SS wire is
>usually comprised of a very large number of strands has any appreciable
>effect on the loss?

Hi Larry,

Below, you show you have a Kelvin Bridge capable of determining the
resistance regardless of stranding, trust your tools but know their
(and your own) limitations. Multiple strands is an asset at very low
frequencies for Litz wire - an unlikely application in this forum
(given both that stranded wire does not meet the criteria for Litz
wire, nor do the operating frequencies we typically encounter here).

> Assuming that EZNEC can do the modeling correctly,
>what would be approximate values to use for the resistivity and relative
>permeability?

Only you are in a position to determine its ferromagnetic
characteristic, at least to a first pass (of the magnet)
approximation.

> I did a quick measurement in a short piece of SS stranded
>wire measured a DC resistance (with a 4 wire ohmmeter) of ~50 times that
>of copper.

Seems like a suitable clue. It could be a greater problem if you
built it into coils, although it may enhance the antenna's efficiency
per unit length through circular radiation endowed by powerless
acceleration in counter-anti-clockwise constant simultaneous phase
changes.

73's
Richard Clark, KB7QHC

2418. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 06:04:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412d7efd_2@corp.newsgroups.com>
Source record: 90340

Roy Lewallen wrote:
> One notable case is the idea of
> using a balun at the input of a tuner to improve the balun's balancing
> properties. I had believed it to work, but he showed me where I was
> wrong, giving me the opportunity to increase my knowledge.

Over on eHam.net, he just admitted that a real world application
does not act like that perfect paper solution. He said:

"In real life, stray capacitances from the network to ground modify
the behavior of the system when the balun is moved ..."
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2419. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 06:06:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <65vqi09febgo3kasuukl52qrp491al0k6r@4ax.com>
Source record: 90339

On 26 Aug 2004 03:22:22 GMT, pdrunen@aol.com (PDRUNEN) wrote:

>How about the same concept with the antenna as a square?

Hi OM,

In classical literature, the circular halo represents eternity,
whereas the square halo represents the four elements of earth and
identifies a living person.

73's
Richard Clark, KB7QHC

2420. Re: Stainless steel antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 06:45:53 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <mSvlZeDhcYLBFASu@ifwtech.co.uk>
Source record: 90341

Larry Benko wrote:
>Since this topic has been recently discussed, I was wondering how well
>EZNEC (ver. 4+ here) would model a wire antenna made with stainless
>steel wire. The "Wire Loss" table in EZNEC allows a User Defined
>Resistivity and Relative Permeability. Would the fact that SS wire is
>usually comprised of a very large number of strands has any appreciable
>effect on the loss? Assuming that EZNEC can do the modeling correctly,
>what would be approximate values to use for the resistivity and
>relative permeability? I did a quick measurement in a short piece of
>SS stranded wire measured a DC resistance (with a 4 wire ohmmeter) of
>~50 times that of copper.

Stranded wire will increase the RF resistance compared to the equivalent cross-section of solid - but a DC resistance measurement will not show this.

In both cases the skin effect forces the RF current to flow on the surface. The solid wire has a continuous surface, but on stranded wire the current path has to hop from strand to strand. Because the sideways contact pressure between strands on the surface is not very great, this increases the resistance per unit length.

Bare stranded copper is very vulnerable to this effect, because copper corrodes readily in the atmosphere and even a thin film of corrosion will force the strands apart. You'd be very unlikely to notice the gradual worsening of performance in something like an HF antenna... but it's still there.

Stainless steel is rather an opposite case: the RF resistance of most grades of SS is so high that stranding may not make much extra difference, and of course it's also much less easily corroded than copper.

What kind of wire you choose depends on your priorities. For example, for marine use the absolute priority is that the antenna is available at all times, so they use thick stranded phosphor-bronze for their HF "wires". It isn't the best RF material, but it's so strong, your 80m and 40m inverted-Vs make very good tower guys.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2421. Re: Source For 72 or 75 Ohm Ladder Line ???

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 10:22:33 UTC
From: K4SQR@juno.com
Message-ID: <7c8be5b4.0408260222.1e3a0dbb@posting.google.com>
Source record: 90342

E-mail ComTek: info@comteksystems.com to see if they still have any 72
ohm twinlead left; was .20c/ft.
GL,
Jim

"Micro MegaWatt" <MMW@power.net> wrote in message
news:<uvHWc.131575$sh.83524@fed1read06>...
> Had an E-Mail as to where to buy ladder line -- 72 or 75 ohm for antenna
> feeder
>
> Understand it is scarce in the USA but may be available in the UK
>
> Sources anyone? thanks

2422. Re: fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 11:50:18 UTC
From: G&R <spam@limbo.hell>
Message-ID: <W7kXc.28005$DG.1251787@news20.bellglobal.com>
Source record: 90343

I regularly use solid fibre glass rods for the contstruction of the Baby
Boomer Quad.

Drop me an email as these are difficult to cut and I'll be glad to cut them
for you.

73,
Guenther VE3CVS
info@degendesigns.com
www.degendesigns.com

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-296C03.14083225082004@comcast.dca.giganews.com...
>
> I am in need of 3 short lengths (10-12") of 1" diameter fiberglass rod
> and I cannot find any locally. Anybody have some left-over pieces that
> they might sell?? Tnx in advance.
>
> Gary

2423. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 13:01:36 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <QalXc.5721$9P.1536@trnddc04>
Source record: 90344

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:65vqi09febgo3kasuukl52qrp491al0k6r@4ax.com...
> On 26 Aug 2004 03:22:22 GMT, pdrunen@aol.com (PDRUNEN) wrote:
>
> >How about the same concept with the antenna as a square?
>
> Hi OM,
>
> In classical literature, the circular halo represents eternity,
> whereas the square halo represents the four elements of earth and
> identifies a living person.
>
> 73's
> Richard Clark, KB7QHC

These halos have gaps in them- finite eternity ??

Dale W4OP

2424. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 13:13:22 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <SIlXc.867$W_5.484@newsread1.news.pas.earthlink.net>
Source record: 90345

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:QalXc.5721$9P.1536@trnddc04...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:65vqi09febgo3kasuukl52qrp491al0k6r@4ax.com...
> > On 26 Aug 2004 03:22:22 GMT, pdrunen@aol.com (PDRUNEN) wrote:
> >
> > >How about the same concept with the antenna as a square?
> >
> > Hi OM,
> >
> > In classical literature, the circular halo represents eternity,
> > whereas the square halo represents the four elements of earth and
> > identifies a living person.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> These halos have gaps in them- finite eternity ??
>
> Dale W4OP
>
>
Dale
It's ephemeral eternity and finite infinity.
;^)
73
H.

PS
I was JUST KIDDING about zip cord.

2425. Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 13:16:07 UTC
From: Darrell Gordon W4CX <w4cx.nospam@arrl.net>
Message-ID: <7mnri09ar95859b0jl800hshckdj08dmmr@4ax.com>
Source record: 90346

Group..I've just discovered this group (what took me so long?) and am impressed with the knowledge here. I am shopping for an antenna analyzer and am stymied by the choices (or lack thereof). In all of hamdom (sub $600), I only find MFJ, Autek, AEA wireless, and Kuranishi to choose from. I've checked eham reviews and found that the AEA VIA (not Bravo) rates highest...and most expensive. Probably worth it. Unfortunately, it's only good to 54Mhz, and I'd need up to 450Mhz. I know this is impossible, and would be willing to go with separate units (Autek), but they have awful reviews re: quality.

My question: What are you guys using for HF measurements? What about V/UHF measurements? Do you recommend any particular model? How about used HP gear from ebay (yes, I know the risks). V/UHF is my priority since I'm building some copper loops for 6 and 2. What say you sage antenna gurus?
Darrell W4CX

2426. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 14:29:25 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <9tmXc.13956$3O3.11615@newsread2.news.pas.earthlink.net>
Source record: 90347

"Darrell Gordon W4CX" <w4cx.nospam@arrl.net> wrote in message
news:7mnri09ar95859b0jl800hshckdj08dmmr@4ax.com...
> Group..I've just discovered this group (what took me so long?) and am
> impressed with the knowledge here. I am shopping for an antenna
> analyzer and am stymied by the choices (or lack thereof). In all of
> hamdom (sub $600), I only find MFJ, Autek, AEA wireless, and Kuranishi
> to choose from. I've checked eham reviews and found that the AEA VIA
> (not Bravo) rates highest...and most expensive. Probably worth it.
> Unfortunately, it's only good to 54Mhz, and I'd need up to 450Mhz. I
> know this is impossible, and would be willing to go with separate
> units (Autek), but they have awful reviews re: quality.
>
> My question: What are you guys using for HF measurements? What about
> V/UHF measurements? Do you recommend any particular model? How about
> used HP gear from ebay (yes, I know the risks). V/UHF is my priority
> since I'm building some copper loops for 6 and 2. What say you sage
> antenna gurus?
> Darrell W4CX
>
Hi Darrell
guru, schmuru
you will find the gamut of experience and education here, though
as well as some amazing flame wars
I have the MFJ with 450 and it works OK
Only measures SWR on 450.
It's not a laboratory instrument, but I have used it for years and it gets
the job done.
Priceless for setting up the HF mobile.
I have no comparative experience except with an old General Radio bridge in
my AM radio days decades ago.
73
H.
NQ5H

2427. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 14:43:11 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408260643.25e586e3@posting.google.com>
Source record: 90348

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:<$VzTYJGVQeKBFA5j@ifwtech.co.uk>...
> SpamHog wrote:
> >
> >My balun box is small, at most 3/4" deep, all metal contacts are
> >already coated with thin epoxy, and the transformer wire is PVC coated
> >too, so a momentary contact with water spray, soon to be soaked up by
> >the PU, should be OK.
> >
> Agreed. However, the PU foams that we buy in DIY stores do tend to soak
> up water into the outer layer, especially after the smooth surface has
> been cut to trim off any excess.
>
> Some foams are notably better than others in this respect, and it might
> be better to look for the special 'closed cell' foams that are
> specifically rated for use in for flotation aids.
>
> >I'll do another test in a small plastic box containing some wiring, all
> >pre-wetted. As the foam keeps expanding as it sets it may be a good
> >idea to avoid closing and bolting the box lid before it cured
> >completely, or at very least to provide some escape holes. More later.
>
> Before you do, you'd better read this:
> http://www.diyfaq.org.uk/humour.html#foam

The link brings up fond memories of a very similar debacle I saw first hand. This one wasn't "engineered" by a home shop canoe builder, this one was put together by none other than the U.S. Navy.

My first job out of school 40+ years ago was as a civilian mechanical engineer with the U.S. Naval Air Engineering Center. The group I worked in was responsible for the design and ongoing development of carrier-based steam aircraft catapults.

Catapults are individually calibrated and periodically recalibrated by launching minimum-budget wheeled vehicles of various weights called "deadloads" off the catapults in into the water when the carrier is in port. The idea is/was to create weight vs. end speed vs. steam pressure curves which are vital bits of info when twisting the catapult steam pressure control knobs below to get the airplanes off the end of the catapults flying nicely instead of into the drink or on the other end of the scale not torn apart by excessive g forces.

Deadloads are, or were at least back then, simply big steel boxes of various weights to simulate the range of aircraft weights the

catapults dealt with. Each corner of the box was equipped with a wheel salvaged from junk aircraft. They were divided up into internal "watertight" compartments and hopefully they floated after a test shot and could be reused. Some deadloads floated, some leaked or came apart and sank. An average deadload weighed 35,000 pounds and was launched at perhaps 115 mph.

Along came this self-proclaimed engineering genius from the next group yonder who decided that his route to military fame and glory was to become the guy who came up with the concept of filling the deadloads with foamed flotation compounds and save all deadloads from the briny deep.

At that point in time DIY foamed flotation plastics were experimental and were not yet on the general market. But he managed to acquire some samples of a two-part foaming compound for test purposes. He also managed to get hold of an old deadload and parked it on the tarmac off to the side of the main hanger and went to work drilling holes in all the compartments. Then he went back and poured carefully measured amounts of part 1 and 2 into each compartment.

I had no idea what was going on out back at the hanger, I wasn't involved in it. Until a lieutenant commander who worked in our area came down the main aisle with tears of laughter rolling down his cheeks hollering "You gotta see it to believe it!" So off we trooped to find out what was going on. The genius had slipped a decimal point with his slide rule and the deadload had been loaded with ten times more foaming agent than it should have had.

The deadload had turned into a steel ball 10-12 feet in diameter with it wheels neatly arranged around it's equator, plastic shoots were flying dozens of feet into the air like fireworks and all over the tarmac, beyond priceless.

I keep wondering what that guy would have done to a balun box . .

> For 'canoe', read 'kayak'... and don't say that nobody warned you!

w3rv

2428. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 14:48:21 UTC
From: richardharrison@webtv.net
Message-ID: <26229-412DF835-226@storefull-3251.bay.webtv.net>
Source record: 90349

Roy, W7EL wrote:
"Some stainless steels are ferromagnetic, with a permability I`d guess at 100 or more. That reduces the skin depth, and therefore increases the RF resistance by a factor of 10."

Being ferromagnetic does not disqualify an antenna material. Most CB whips are stainless steel. They aren`t too lossy because they are only about 1/4-wave at 27 MHz and must be large enough in diameter to be durable. In the range of 0.55 MHz to 1.7 MHz, most transmission is from ordinary non-stainless steel towers. The only coating on many of these is paint. The cross-section to length ratio is economically small, but I doubt the loss added by using nonplated steel could be measured.

Best regards, Richard Harrison, KB5WZI

2429. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 15:05:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hturi055tquj4rbh5l16jr23g5te7gv6g9@4ax.com>
Source record: 90350

On Thu, 26 Aug 2004 13:01:36 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:
>These halos have gaps in them- finite eternity ??

Hi Dale,

Do they glow?

73's
Richard Clark, KB7QHC

2430. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 15:23:51 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-03E91E.10235026082004@newssvr22-ext.news.prodigy.com>
Source record: 90351

In article <20040825201845.18203.00002099@mb-m03.aol.com>,
k9sqg@aol.com (K9SQG) wrote:

> I used PVC improvised standoffs for my shunt fed tower.

I just got down from the scary-as-hell trip up the tower. The wind was really blowing up on top. I stripped the old stuff and will have to go back once I figure out what is need. The 3 foot (~2 foot past the tower) wooden stand off I used last time was pretty wx-worn. I don't think PVC is strong enough and the sun eats the the PVC stuff up. May have to use a good hard wood again. It will probably out last me. Still not sure how to secure the Inverted-L antenna wire to the stand off on top. It needs to be tied off so it will not slip at the bend.

I am getting too old to climb a 22+ year old tower. Everything looked okay...I just wanted to get down.

2431. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 15:26:02 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <einXc.12476$K_4.534@newssvr29.news.prodigy.com>
Source record: 90353

Cecil Moore wrote:
> Roy Lewallen wrote:
>
>> Do you have a quote showing exactly what Tom said, in context?
>
>
> Here's one from his web page:
>
> "What determines current distribution in a loading coil? The capacitance
> to the outside world and the impedance above the loading coil. The current
> in any inductor would be equal at each end except for displacement
> currents,
> which are "imaginary currents" that flow through capacitance."
>
> He completely ignores the fact that, for a standing-wave antenna, the net
> current is the superposed phasor sum of the forward current and reflected
> current and whatever phase shift occurs through the coil is doubled because
> those two currents are traveling in opposite directions.
>
> He is thinking lumped circuit model when he should be using a distributed
> network model. What he says is reasonably accurate for a traveling-wave
> antenna but certainly not for a standing-wave antenna.
>
> EZNEC clearly illustrates the difference in the currents when the coil is
> modeled as a coil of wire segments and not as a lumped inductor. Anyone who
> would like a copy of the EZNEC file need only request it.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

Current waves can travel in two directions at the same time. Charge
can't. For a guy who doesn't seem to be able to make the distinction,
you don't have any business criticizing Tom Rauch's understanding of
the situation.
73,
Tom Donaly KA6RUH

2432. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 15:28:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a2vri0ljnfqeo7ck3okjut206i4mi3kqfj@4ax.com>
Source record: 90352

On Thu, 26 Aug 2004 13:16:07 GMT, Darrell Gordon W4CX
<w4cx.nospam@arrl.net> wrote:

>What are you guys using for HF measurements?

Hi Darrell,

General Radio 1606-A: 400KHz - 60MHz, Resistance 0 - 1000 Ohms ï¿½1%,
Reactance 0 - 5000/F Ohms ï¿½2%.

73's
Richard Clark, KB7QHC

2433. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 15:55:45 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <5KnXc.958$W_5.144@newsread1.news.pas.earthlink.net>
Source record: 90354

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:hturi055tquj4rbh5l16jr23g5te7gv6g9@4ax.com...
> On Thu, 26 Aug 2004 13:01:36 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
> >These halos have gaps in them- finite eternity ??
>
> Hi Dale,
>
> Do they glow?
>
> 73's
> Richard Clark, KB7QHC

Richard, with enough power.....
73
H.

Now where were those 4CX25000's???

2434. Re: QST article on the halo

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 15:59:24 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncis26s.311m.bit-bucket@shell.config.com>
Source record: 90355

On 26 Aug 2004 03:22:22 GMT, PDRUNEN hath writ:
> Hi Group,
>
> I like the halo antenna for 6 meters in this months QST. Can anyone tell me
> what the input impedance would be if the halo was directly connected to the
> coax?
>
> How about the same concept with the antenna as a square?

http://www.jonz.net/W3DHJ/6mhalo.html

73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2435. Re: fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 16:03:05 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncis2dp.311m.bit-bucket@shell.config.com>
Source record: 90356

On Wed, 25 Aug 2004 14:08:32 -0700, Angela & Gary hath writ:
>
> I am in need of 3 short lengths (10-12") of 1" diameter fiberglass rod
> and I cannot find any locally. Anybody have some left-over pieces that
> they might sell?? Tnx in advance.

Look at replacement tool handles at the local hardware store.
Shovel handles, rake handles, broom handles, etc.

Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2436. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 16:05:46 UTC
From: "aunwin@insightbb.com"
Message-ID: <uTnXc.187268$8_6.72521@attbi_s04>
Source record: 90357

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:26229-412DF835-226@storefull-3251.bay.webtv.net...
> Roy, W7EL wrote:
> "Some stainless steels are ferromagnetic, with a permability I`d guess
> at 100 or more. That reduces the skin depth, and therefore increases the
> RF resistance by a factor of 10."
>
> Being ferromagnetic does not disqualify an antenna material.

Whoa... now you are misquoting Roy.

He never did DISQUALIFY the use of stainless steel
He clearly stated in technical terms what stainless steel
lacked in an area that is important with respect to radiation.
I suspect the use of stainless steel for consumer antennas
is an engineering one to prevent rust and antenna mechanical distortion
which outways the loss in efficiency.
It was this difference that Roy was alluding to and is the reason why
amateurs take note of the characteristics of material used and is why
aluminum,copper and the like
is used in the communication world. Many in the amateur community allude to
communication obtained with a wet string but in no way are they
DISQUALIFYING the use of aluminum and the like. Stop throwing mud and get
with the program. You will never,ever make the smallest piece of your mud
stick to the likes of Roy and Tom with mis quotations.
Art
Art

Most CB
> whips are stainless steel. They aren`t too lossy because they are only
> about 1/4-wave at 27 MHz and must be large enough in diameter to be
> durable. In the range of 0.55 MHz to 1.7 MHz, most transmission is from
> ordinary non-stainless steel towers. The only coating on many of these
> is paint. The cross-section to length ratio is economically small, but I
> doubt the loss added by using nonplated steel could be measured.
>
> Best regards, Richard Harrison, KB5WZI
>

2437. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 16:12:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <os2si012fg4c7s5s7im2j0ib6o8o15o092@4ax.com>
Source record: 90358

On Thu, 26 Aug 2004 16:05:46 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>Stop throwing mud

more trolling

2438. test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 16:46:54 UTC
From: Drink <drink@gnt.net>
Message-ID: <cgl40i$1qb$1@news.utelfla.com>
Source record: 90359

[No readable article body recovered]

2439. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 16:51:54 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <412E1572.64466E81@shaw.ca>
Source record: 90360

I've used old broken hockey stick handles for standoffs. They will last
for years and are are very strong. The handle never breaks, it's always the
part at the bottom.

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2440. Re: Direct TV question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:05:27 UTC
From: Glen Overby <coreSPAMsample@charter.net>
Message-ID: <10is62ndkakmtc2@corp.supernews.com>
Source record: 90361

PDRUNEN <pdrunen@aol.com> wrote:
>I am starting to see the RCA's direct TV disk showing up for a fair price at
>garage sales. I have picked up about 3 of them so far.
>
>What I have learned on the internet is that the sates are around 12GHz and the
>down conversion is about 1 GHz.
>
>I recall a ham band around 10GHz and wander if anyone is doing work with them
>on the ham bands?

Yes, and W1GHZ has an on-line book about using them as 10ghz antennas:

http://www.qsl.net/n1bwt/contents.htm

In the Twin Cities MN area we have nearly 2 dozen people on 10ghz, most with
various types of DSS dishes. If you got the feed horn with the dish, you can
sometimes drill it out to 3/4" for 10ghz.

>How much gain would this antenna get at 12GHz. I believe the diameter is about
>19 or so inches.

At 10ghz we typicly get in the area of 31-33dBi gain from the 19" dishes.

Glen, KC0IYT

2441. Re: Butternut HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:10:46 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <412e15e9.619025500@news.galilei.com>
Source record: 90362

Hi Phil

Thanks for the name of the Candy Store!

Besides the killer orange, I live very close to the War Zone where the touchdown BOMBINGS take place, hi hi.....
Thought I was back in Nam until I was told what it was!

My step son is going to school in Memphis, so far he has had one car stolen, two destroyed beyond FMV by vandals and theives. Far cry from what it was years ago when I stayed there for a few months.

Of all the years I have been a ham, I never got into to many of what could be the interesting parts of it. When I first started, all the locals were on 6 meter AM, my rig was a used Heathkit Sixer (Lunchbox), just sold it before moving down here to Knoxville, along with most of my Heathkit gear.
My first 40/80 CW transmitter was a home brew job and I used it for years. Using a Heath HR10B for the receiver. I finally built an HW-101 in the early 70's and used it for over 20 years.
It was when I finally burned out on CW that I found the need to upgrade to something that handled voice a whole lot better. So I purchased a used 830-S and have been using it ever since.
Plus the array of HT's and old equipment I would keep barely working. I really hated to let almost everything go, but you just can move 20 years of accumulated junk very easily. I still had 7 trailer loads when I moved south, but that included one small business I retained too.

I will probably live out the rest of my days here! It's nice country now and will probably shift in the area I'm in downward, but I can hope for the best. I can't visualize having to move again, hi hi.....

I do hope to get back on the air before winter sets in! I finally made life member status at our local repeater club (no more dues, hi hi) Then I up and move! Figures.

TTUL - 73+ de Gary - KG ZP

2442. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:18:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cj6si0hqb5pmjd928vr8ga2kvbtl6ffrio@4ax.com>
Source record: 90363

On Tue, 24 Aug 2004 00:54:10 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>Now, I know that such antennas are not designed to be transmit
>antennas (and again, perhaps too short to boot); so I will leave that
>to others to engage as a receive antenna if they doubt reciprocity (or
>I will do that later this eve for them as I often have to).
>

Hi All,

I've repeated the models with longer runs: 1000 meters length @ 80M.

For transmits, the single wire over ground shows a gain of 0.42dBi at
10ï¿½ but with a F/B of 16.4dB. EZNEC proclaims the model exhibits 17dB
loss.

For transmits, the double wire over ground shows a gain of 1.2dBi at
10ï¿½ but with a F/B of 11.7dB. EZNEC proclaims the model exhibits 17dB
loss.

However, Beverages are not typically the first choice for
transmission, but rather reception. Does reciprocity hold? As no one
has offered to help the Little Red Hen, would they care to share in
the cake?

For the receive single wire Beverage @ 10ï¿½ w/600 Ohm load
Total load power = 5.543E-07 watts

For the receive double wire Beverage @ 10ï¿½ w/600 Ohm load
Total load power = 6.623E-07 watts

Now, if we compare the two receive loads we find they differ by .77dB
which is the same difference for the transmission models. By most
accounts, that means reciprocity prevails. By further accounts, that
means the double wire system is superior - if you want to lay out 1000
meters of wire for less than one dB (that pesky one dB value judgment
again).

By this point, what with all the trolling going on and so little
actual technical content, What was this all about?

73's
Richard Clark, KB7QHC

2443. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:23:18 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgl6a6$a3b$1@titan.btinternet.com>
Source record: 90364

Richard Clark recommends -
> General Radio 1606-A: 400KHz - 60MHz, Resistance 0 - 1000 Ohms ±1%,
> Reactance 0 - 5000/F Ohms ±2%.
>
==========

Is this recommendation of yours traceable directly to International
Measurement Standards or has it passed through the hands of a sales
department?

Punchinello.

2444. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:37:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgl73vmla1@hercules.btinternet.com>
Source record: 90365

> I suspect the use of stainless steel for consumer antennas
> is an engineering one to prevent rust and antenna mechanical distortion
> which outways the loss in efficiency.

==========

Your suspicion is well founded.

ECONOMICS INVARIABLY RULES.

Reg

2445. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:39:25 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <2g6si0519vch9jeeq0mu436t96i27d2vb8@4ax.com>
Source record: 90366

On Thu, 26 Aug 2004 15:28:36 GMT, Richard Clark <kb7qhc@comcast.net> wrote:

>On Thu, 26 Aug 2004 13:16:07 GMT, Darrell Gordon W4CX
><w4cx.nospam@arrl.net> wrote:
>
>>What are you guys using for HF measurements?
>
>Hi Darrell,
>
>General Radio 1606-A: 400KHz - 60MHz, Resistance 0 - 1000 Ohms ï¿½1%,
>Reactance 0 - 5000/F Ohms ï¿½2%.
>
>73's
>Richard Clark, KB7QHC

Hi Darrell,

I was just about to tell you what I use, but Richard, above, beat me to it. For HF measurements this bridge, the General Radio 1606-A, is the Cadillac of all bridges. It 's been the bridge of choice for nearly every AM broadcast engineer in determining t he impedance of AM broadcast antennas since it came on the market in 1955. It's very nearly the same as it's predecessor, the GR 916-A, which came out in the 1940's. It's what the AM antenna engineers used prior to the 1606.

You can find the 1606-A on eBay, and the price ranges from $200 to $1000. However, you also need a signal generator to feed it the signal it needs to operate, plus your receiver as the signal detector.

I also use more modern impedance measuring devices, such as Hewlett-Packard's HP-4815 Vector Impedance Meter, and their HP 8405 Vector Voltmeter. These two instruments are also laboratory grade quality. All of these instruments far exceed the accuracy of the devices you listed.

Hope this helps,

Walt, W2DU

2446. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 17:46:25 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <m68si0tkp96ukhhletmu7gu2f05b2bacep@4ax.com>
Source record: 90367

On Thu, 26 Aug 2004 17:23:18 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Richard Clark recommends -
>> General Radio 1606-A: 400KHz - 60MHz, Resistance 0 - 1000 Ohms ï¿½1%,
>> Reactance 0 - 5000/F Ohms ï¿½2%.
>>
>==========
>
>Is this recommendation of yours traceable directly to International
>Measurement Standards or has it passed through the hands of a sales
>department?
>---
>Punchinello.
>
Hi Reg,

I obtained my 1606-A in 1968, Ser # 924, directly after calibrated to IMS. I have checked it periodically against some of my own standards, only to find the calibration hasn't varied even the width of an engraved graduation mark on either the reactance or resistance dial in all these years.

Walt

2447. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 18:07:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gr8si05mabsomli6dn39jh9t1l3m3hf0f6@4ax.com>
Source record: 90368

On Thu, 26 Aug 2004 17:23:18 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Is this recommendation of yours traceable directly to International
>Measurement Standards or has it passed through the hands of a sales
>department?

Hi Punchinello,

Your hedged question belies an ignorance of premium equipment that has
been dominant in the field for 50 years. How is it you fail to
recommend what you use?

I have calibrated such in a Primary Electronic Standards Lab against
standards traceable to NBS at the time. [but you knew this already]
I did such work under contracts to Boeing, and the model I own was
acquired from Boeing complete with certificates of traceability(not my
own work, I have only on occasion found a piece of precision gear with
my stickers on it).

I have never encountered a GR 1606 that fell outside of its
specifications - except for one where someone apparently burnt out one
bridge component, a resistor. Undoubtedly this was accomplished by
applying a transmitter to the excitation port - one can only imagine
the fate of equipment connected to the detector port. This was very
simple to recover from (one resistor). The instrument is robust and
built like a Swiss precision watch. There are very few things that
could go wrong and only under physical duress (like dropping it down
three floors of stairs).

73's
Richard Clark, KB7QHC

2448. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 18:36:40 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cglajo$g0p$1@sparta.btinternet.com>
Source record: 90369

"Richard Clark" asked -

> Does reciprocity hold?

How dare you question it?

Punchinello.

2449. Re: Potting a balun: wax vs. epoxy vs. urethane foam?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 18:41:10 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <admaKwWG7iLBFAVO@ifwtech.co.uk>
Source record: 90370

Brian Kelly wrote:
>
>The deadload had turned into a steel ball 10-12 feet in diameter with
>it wheels neatly arranged around it's equator, plastic shoots were
>flying dozens of feet into the air like fireworks and all over the
>tarmac, beyond priceless.
>
>I keep wondering what that guy would have done to a balun box . .
>
Nice one!

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2450. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 18:53:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10isccq3cqv971e@corp.supernews.com>
Source record: 90271

You're correct that CB whips, 2 meter whips, AM broadcast towers, and the like are just fine because of their large diameter.

But think about it a little bit. If you reduce the frequency by a factor of two, the length of a resonant antenna increases by a factor of two. The skin depth decreases by a factor of the square root of two, so the resistance per unit length increases by this factor. So at half the frequency, the resistance of a resonant antenna has increased by the square root of two. Furthermore, you don't typically use 1/4 inch diameter wire for an HF dipole, for example. (And most hams presumably wouldn't make an HF dipole from surplus broadcast towers -- but then I haven't seen your station.) Assuming you're using a resonant antenna of constant diameter, the loss gets higher as the frequency gets lower.

Now go back and read what I wrote. Notice that I said that the wire was most likely to be a problem with antennas on the order of an 80 meter dipole length. Now you understand (I hope) why that qualification.

If you use an antenna at a frequency higher than its primary resonance (such as a 40 meter dipole on 15, or a G5RV on a high frequency band), the loss gets greater yet, since the skin depth decreases with frequency.

Roy Lewallen, W7EL

Richard Harrison wrote:
> Roy, W7EL wrote:
> "Some stainless steels are ferromagnetic, with a permability I`d guess
> at 100 or more. That reduces the skin depth, and therefore increases the
> RF resistance by a factor of 10."
>
> Being ferromagnetic does not disqualify an antenna material. Most CB
> whips are stainless steel. They aren`t too lossy because they are only
> about 1/4-wave at 27 MHz and must be large enough in diameter to be
> durable. In the range of 0.55 MHz to 1.7 MHz, most transmission is from
> ordinary non-stainless steel towers. The only coating on many of these
> is paint. The cross-section to length ratio is economically small, but I
> doubt the loss added by using nonplated steel could be measured.
>
> Best regards, Richard Harrison, KB5WZI
>

2451. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 19:26:54 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10isec4dn2qb331@corp.supernews.com>
Source record: 90272

I have an MFJ 269 and a GR 1606A. Each has its place.

At my location, about 10-15 miles from a hilltop with powerful TV, FM, and I believe AM broadcast transmitters, the MFJ is pretty useless for most antenna measurements. The impinging RF confuses it. It's great for fiddling with circuits on the bench, quick measurements of coax length, and checking the resonance of a 2 meter whip. I'm sure the RF problem would be the same for the other analyzers. Years ago, I rented an HP vector impedance meter for a consulting job, and it too was unable to handle the RF environment. A friend lent me an ancient tube-type Z meter that had a tunable detector, and I ended up making the measurements with it. (That was before I got the 1606A.)

I use the 1606A when I need to make serious and accurate antenna measurements. It's tedious to use, having to be calibrated at the measurement frequency before making measurements. It only goes up to 60 MHz. And it requires an external signal generator and detector. The external detector is really its strength, though, since by using a narrowband detector (I use an old ICOM R1 portable receiver) I can make good measurements in the RF environment I live in. It would be a real nuisance to haul it up a tower, although you can put it on top of a stepladder.

Sorry, I haven't used any of the other analyzers so can't help you out with the comparison between them.

Roy Lewallen, W7EL

Darrell Gordon W4CX wrote:

> Group..I've just discovered this group (what took me so long?) and am
> impressed with the knowledge here. I am shopping for an antenna
> analyzer and am stymied by the choices (or lack thereof). In all of
> hamdom (sub $600), I only find MFJ, Autek, AEA wireless, and Kuranishi
> to choose from. I've checked eham reviews and found that the AEA VIA
> (not Bravo) rates highest...and most expensive. Probably worth it.
> Unfortunately, it's only good to 54Mhz, and I'd need up to 450Mhz. I
> know this is impossible, and would be willing to go with separate
> units (Autek), but they have awful reviews re: quality.
>
> My question: What are you guys using for HF measurements? What about
> V/UHF measurements? Do you recommend any particular model? How about
> used HP gear from ebay (yes, I know the risks). V/UHF is my priority
> since I'm building some copper loops for 6 and 2. What say you sage
> antenna gurus?
> Darrell W4CX

>

2452. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 20:52:41 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <75jsi05pgj11ahcs414qf50t7tfhkeiq1p@4ax.com>
Source record: 90273

On Thu, 26 Aug 2004 12:26:54 -0700, Roy Lewallen <w7el@eznec.com> wrote:

>I have an MFJ 269 and a GR 1606A. Each has its place.
>
>At my location, about 10-15 miles from a hilltop with powerful TV, FM,
>and I believe AM broadcast transmitters, the MFJ is pretty useless for
>most antenna measurements. The impinging RF confuses it. It's great for
>fiddling with circuits on the bench, quick measurements of coax length,
>and checking the resonance of a 2 meter whip. I'm sure the RF problem
>would be the same for the other analyzers. Years ago, I rented an HP
>vector impedance meter for a consulting job, and it too was unable to
>handle the RF environment. A friend lent me an ancient tube-type Z meter
>that had a tunable detector, and I ended up making the measurements with
>it. (That was before I got the 1606A.)
>
>I use the 1606A when I need to make serious and accurate antenna
>measurements. It's tedious to use, having to be calibrated at the
>measurement frequency before making measurements. It only goes up to 60
>MHz. And it requires an external signal generator and detector. The
>external detector is really its strength, though, since by using a
>narrowband detector (I use an old ICOM R1 portable receiver) I can make
>good measurements in the RF environment I live in. It would be a real
>nuisance to haul it up a tower, although you can put it on top of a
>stepladder.
>
>Sorry, I haven't used any of the other analyzers so can't help you out
>with the comparison between them.
>
>Roy Lewallen, W7EL
>
It's gratifying to learn that the 'ole 1606 is still being used by people in the group. About ten years ago I wondered what I'd do if anything happened to mine, especially since General Radio was already out of business, so I found a 1606-B for $400 as a backup. Son Rick, WB4GNR, is using it, but it's still my backup.

Walt, W2DU

2453. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 21:01:17 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <hcsXc.26092$cx.25956@bignews4.bellsouth.net>
Source record: 90274

I guess nobody just 'tunes for maximum smoke' any more

"Darrell Gordon W4CX" <w4cx.nospam@arrl.net> wrote in message
news:7mnri09ar95859b0jl800hshckdj08dmmr@4ax.com...
> Group..I've just discovered this group (what took me so long?) and am
> impressed with the knowledge here. I am shopping for an antenna
> analyzer and am stymied by the choices (or lack thereof). In all of
> hamdom (sub $600), I only find MFJ, Autek, AEA wireless, and Kuranishi
> to choose from. I've checked eham reviews and found that the AEA VIA
> (not Bravo) rates highest...and most expensive. Probably worth it.
> Unfortunately, it's only good to 54Mhz, and I'd need up to 450Mhz. I
> know this is impossible, and would be willing to go with separate
> units (Autek), but they have awful reviews re: quality.
>
> My question: What are you guys using for HF measurements? What about
> V/UHF measurements? Do you recommend any particular model? How about
> used HP gear from ebay (yes, I know the risks). V/UHF is my priority
> since I'm building some copper loops for 6 and 2. What say you sage
> antenna gurus?
> Darrell W4CX
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2454. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 21:04:38 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <GfsXc.14252$3O3.8073@newsread2.news.pas.earthlink.net>
Source record: 90275

And to think I've been tuning for minimum smoke all these years.
;^)

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:hcsXc.26092$cx.25956@bignews4.bellsouth.net...
> I guess nobody just 'tunes for maximum smoke' any more
>
> "Darrell Gordon W4CX" <w4cx.nospam@arrl.net> wrote in message
> news:7mnri09ar95859b0jl800hshckdj08dmmr@4ax.com...
> > Group..I've just discovered this group (what took me so long?) and am
> > impressed with the knowledge here. I am shopping for an antenna
> > analyzer and am stymied by the choices (or lack thereof). In all of
> > hamdom (sub $600), I only find MFJ, Autek, AEA wireless, and Kuranishi
> > to choose from. I've checked eham reviews and found that the AEA VIA
> > (not Bravo) rates highest...and most expensive. Probably worth it.
> > Unfortunately, it's only good to 54Mhz, and I'd need up to 450Mhz. I
> > know this is impossible, and would be willing to go with separate
> > units (Autek), but they have awful reviews re: quality.
> >
> > My question: What are you guys using for HF measurements? What about
> > V/UHF measurements? Do you recommend any particular model? How about
> > used HP gear from ebay (yes, I know the risks). V/UHF is my priority
> > since I'm building some copper loops for 6 and 2. What say you sage
> > antenna gurus?
> > Darrell W4CX
> >
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004
>
>

2455. Re: circular radiation!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 21:05:48 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <wgsXc.26135$cx.17370@bignews4.bellsouth.net>
Source record: 90276

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:J89Xc.19169$N11.7664@bignews5.bellsouth.net...
> I think the opposing coils caused a temporal rift in the space-time
> continuim - because I would swear I've seen this subject before - or is it
> deja-vue?
>
oooo - ya got me!

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.732 / Virus Database: 486 - Release Date: 7/29/2004

2456. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 21:08:33 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <10isk952a6a7094@corp.supernews.com>
Source record: 90277

> My question: What are you guys using for HF measurements?

The original Autek. Limited accuracy,
but *very* portable and very useful.

I'm building the N2PK Vector Network
Analyzer, which is only good to 60Mhz,
with laboratory accuracy. Paul has hinted
at extensions to allow se to 450Mhz.
See www.n2pk.com .

The GR bridges suggested are very good,
but not too portable.

73, John - K6QQ

2457. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 21:32:08 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <qqksi09ig5ialqgvli58m1lpldhjc15fus@4ax.com>
Source record: 90278

On Thu, 26 Aug 2004 14:08:33 -0700, "John Moriarity" <k6qq@hdo.net>
wrote:

|
|> My question: What are you guys using for HF measurements?
|
|The original Autek. Limited accuracy,
|but *very* portable and very useful.
|
|I'm building the N2PK Vector Network
|Analyzer, which is only good to 60Mhz,
|with laboratory accuracy. Paul has hinted
|at extensions to allow se to 450Mhz.
|See www.n2pk.com .

Me too. Well, let me rephrase... I have had the kit ($220) for about
8 months and have yet to start on it ;)

First I figured I needed a better, smaller soldering iron. $100.

Then I got that and realized I can't see the parts. Got a 10X
Optivisor. $35.

Depth of field is really marginal. Got a lighted magnifier. $50.

Ready to go... oops no anti-static mat and right in the middle of
building bathroom vanity cabinet. Figured I could save money by DIY.

New Delta Unisaw. $1500. Dovetail jig. $400. Better lighting in
garage $400. Hardwood $400. Misc router bits, finishing materials,
spray gun, screws, door and drawer hardware and my labor at $0.05/
hour... don't ask.

Other than that, I use a Boonton 250 or an HP 8405 for impedance
measurements.

2458. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 22:47:54 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040826184754.03820.00002611@mb-m19.aol.com>
Source record: 90279

W7EL wrote:
>
>I have a great deal of respect for Tom, W8JI. In fact, there are few
>people I respect as much. I regard him as being exceptionally honest,
>very analytical, and always seeking to find the truth and increase his
>knowledge. Whenever his view of how things work have been shown to be
>wrong, I've found him to readily accept the corrected view, and be
>grateful of the opportunity to learn something new. I've also learned
>from him on more than one occasion.

That's fine, you are entitled to your opinion. I am sure Tom has also respect for you (as I do) and he would think twice of pontificating at you than at someone who is not so vocal or "famous" due to their status or postings on Internet.
My experience is, as I mentioned it before (I don't take crap for anybody) that when I brought some correction to his fallacy or presented idea that did not exactly jive with his "knowledge", he would in first posting come on the high horse and pontificate and ridicule the person, rather than engage in the discussion of pro or con and try to sort things out. That's what pisses me off, when someone who is wrong resorts to personal attacks (like democrats) rather than engaging in substantive discussion.
He thrives on reflectors where he is protected by the administrators that worship him and will not allow discussions when he is on the losing side. He is not on Amp reflector, mainly because R. Measures debunked some of his postings proclaiming fallacies. Same was on TowerTalk with K7GCO, who called him "great technical imposter". Been there, was done to me.
Again his modus operandi is, when he is wrong, he attacks person rather than engages in discussion and admitting wrong. Then goes quiet for few months and later corrected, emerges as a "guru" on the subject, like it is his own idea. Never admitting or giving credit where is due.
I had about 6 situations like that with him, records are at the web sites, anyone can look it up. I don't give a hoot about "reputation" among the hams, I have a life outside of ham "world". It just burns me when I try with good intentions to bring correction to some crap that is floating around, and for it I get personally attacked and ridiculed.
I don't give a hoot who people want to worship, I have my God. I try to point out some errors or problems, be it wrong information or crapy equipment.
If you want to find out who is gutless, dishonest and nyekulturny, go back to some archives, I can supply you subjects and see for yourself.
I learned thing or two from Tom too, but I also see lot of textbook stuff on his pages and even there are some misleading information. But I will not take crap for saying that 2 + 2 = 4 is wrong.

>
>I find it contemptable and cowardly to attack him -- or anyone -- in a

>forum where he's not a participant and isn't present to correct
>misquotes, quotes taken out of context, and otherwise respond and defend
>himself.
>

The last thing is sentence about wire "losing" conductivity by laying on the ground. That's what I brought up. I know what was the situation with dual wire Beverages, but that sentence was wrong way to describe what is happening in the system. If he is so smart, he should be more careful when describing technical matters. Words mean things.

BTW Tom used EZnec to "prove" that current across the loading coil in the loaded antenna is the same at both ends. When you replace that coil with same inductance value loading stub, you find that current is (significantly) different at the ends of the stub.
Have you corrected him how to use EZnec properly to model lumped inductance and get results that jive with reality? Cecil showed and explained the stuff. In his presentation at Dayton, Tom still propagated that nonsense.

Anyway, back to DR1, getting tired of arguing with "experts".

73 Yuri, K3BU

2459. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 22:50:11 UTC
From: 9V1GO <rmread@starhub.net.sg>
Message-ID: <412e6925$1@news.starhub.net.sg>
Source record: 90280

Hi Darrell,

I have used the Autek VA1 and the MFJ 259B here in 9V for about a year. Must have gotten a good Autek as it has performed well. All of the MFJ series I have used in the past and they will do the job but as has been said, high RF enviornments render it useless.

The MFJ that goes to UHF we used on a field day trip to a remote island just off 9V and it also did a good job. YMMV but the VA1 goes into a pocket for a tower climb, is a bit fiddley, but I find I use it more than the MFJ.

73

Bob 9V1GO

2460. Re: circular radiation!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-26 23:53:23 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <EJuXc.27630$cx.8868@bignews4.bellsouth.net>
Source record: 90281

Are you trying to make an antenna outa those coils?

check one: ____ yes ____no

if so, does it work?

check one ___yes ___no

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2461. Re: Stainless steel antenna wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 00:03:34 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <aTuXc.27708$cx.22669@bignews4.bellsouth.net>
Source record: 90282

The analyzer post gave me an idea you may want to try out -
take equal pieces of copper and stainless wire -
Long enough so that an antenna that size would fall within capabilities of
the analyzer -
see what the ol'analyzer tells you about resonant freq for each -and
resistance for each at resonance -
then try again at different lengths and freqs - compare results
then there oughta be a publishable ratio for those freqs. - whatcha think?
please report back within the week ;-)

"Larry Benko" <xxw0qe@comcast.net> wrote in message
news:CvCdncgWXJp18LDcRVn-iw@comcast.com...
> Since this topic has been recently discussed, I was wondering how well
> EZNEC (ver. 4+ here) would model a wire antenna made with stainless
> steel wire. The "Wire Loss" table in EZNEC allows a User Defined
> Resistivity and Relative Permeability. Would the fact that SS wire is
> usually comprised of a very large number of strands has any appreciable
> effect on the loss? Assuming that EZNEC can do the modeling correctly,
> what would be approximate values to use for the resistivity and relative
> permeability? I did a quick measurement in a short piece of SS stranded
> wire measured a DC resistance (with a 4 wire ohmmeter) of ~50 times that
> of copper.
>
> Thanks and 73,
> Larry Benko, W0QE
>

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2462. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 00:06:32 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <YVuXc.27748$cx.22136@bignews4.bellsouth.net>
Source record: 90283

I use the MFJ - because I could afford it at the time.
...and this analyzer post gives me an idea about the Stainless-steel wire thread - hmmm

"Darrell Gordon W4CX" <w4cx.nospam@arrl.net> wrote in message news:7mnri09ar95859b0jl800hshckdj08dmmr@4ax.com...
> Group..I've just discovered this group (what took me so long?) and am
> impressed with the knowledge here. I am shopping for an antenna
> analyzer and am stymied by the choices (or lack thereof). In all of
> hamdom (sub $600), I only find MFJ, Autek, AEA wireless, and Kuranishi
> to choose from. I've checked eham reviews and found that the AEA VIA
> (not Bravo) rates highest...and most expensive. Probably worth it.
> Unfortunately, it's only good to 54Mhz, and I'd need up to 450Mhz. I
> know this is impossible, and would be willing to go with separate
> units (Autek), but they have awful reviews re: quality.
>
> My question: What are you guys using for HF measurements? What about
> V/UHF measurements? Do you recommend any particular model? How about
> used HP gear from ebay (yes, I know the risks). V/UHF is my priority
> since I'm building some copper loops for 6 and 2. What say you sage
> antenna gurus?
> Darrell W4CX
>

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2463. Re: ANTENNA TWINLEAD FEEDER

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 00:09:03 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <jYuXc.27774$cx.12027@bignews4.bellsouth.net>
Source record: 90284

I dunno about the exact measurements - but I used 300-ohm belden twinlead
(the kind with copper-clad-steel conductor) as a feeder - but tried to keep
to the G5RV measurements - and had good luck with it.

"folio" <ve2lxNOSPAM@sympatico.ca> wrote in message
news:Fv9Xc.22349$DG.1106859@news20.bellglobal.com...
> hello to all
> from Gilles ve2lx
>
> 1 st past ever on this group
>
> I just install temporary an invert dipole feeded with tv twinlead 300 ohm
>
> actually I have no RF interferences from 160 to 12 m (but only low on 10 m
> but no more usable anyway) compare to my end fed I had 2 month ago...!
>
> antenna length is 66 ft or 33 ft each side and feeder length about 48
> ft...the dipole is parralele to the back of the 20 appartement's house and
> the full SFC remote coupler or tuner (builted only for wire tuning) is
on
> my back galery 8 ft from radio on 3 rd floor a little above hand rail...!
>
> (((......I found 75 ohm twin lead......)))
>
> and (I would like to use it instead) for10 to 80 and 160 m (actually I
> do it with 300 ohm twin lead accepting low efficiency on 160 m and perhaps
> on 80 m but it is ok.
>
> my target
> 1...is to have as much efficiency as I can for all bands use primaly on 40
> and 20 m (reason for 66 ft)
> 2...at 75 ohm on 80 meter there will be much less SWR (like 1/30: OR MORE
> WITH 300 OHM on 80 m) due to unmatch compare to 300 ohm
> 3...there will be better energy transfer because dipole is + or - 75 ohms
> and feeder also and the tuner will search less value to match then
therefore
> les chance of RF problem radiations form feeder (les larger) and so on
> 4...feeder length will have less effect at 75 ohm on a all bands
> consideration...?
>
> is this thinking correct
>
> wishing to ear from amateurs with good experience with balance or twin
lead

> feeder
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2464. Multi band scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 00:12:33 UTC
From: "Ron, KC4YOY" <kc4yoy@carolina.rr.con>
Message-ID: <R%uXc.3001$6h6.246718@twister.southeast.rr.com>
Source record: 90285

I'm looking for ideas for a home built multi band
scanner antenna.
I'm thinking about one with separate whips
cut for each band.

Anyone got any good ideas?

73, Ron

C.R."Ron"Lawrence KC4YOY
Antique Radio Collector & Historian
kc4yoy(at)carolina.rr.com

POBox 3015
Matthews, NC 28106-3015
704-289-1166 (home)

Radio Collection Web Page,
http://www.radioheaven.homestead.com
Clough-Brengle equipment web page
http://CloughBrengle.homestead.com
CC-AWA Web Page,
http://www.cc-awa.org
TCA Tube Photo Gallery,
http://radioheaven.homestead.com/TCA.html
SuperHet web page,
http://radioheaven.homestead.com/superhets.html

2465. Re: fiberglass rod

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 00:15:31 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <n2vXc.27834$cx.23500@bignews4.bellsouth.net>
Source record: 90286

if you're using them as couplings -y' might try looking at pvc pipe -or -
use fiberglass cloth and resin and 'roll your own'.
I thought about using resin (with hardener)- then soaking a layer or 2 of
newspapers with it - then rolling my own quad spreaders - but never got a
round 'tuit' - but its on my list of experiments to try.

"Angela & Gary" <gmbelcas@charter.net> wrote in message
news:gmbelcas-296C03.14083225082004@comcast.dca.giganews.com...
>
> I am in need of 3 short lengths (10-12") of 1" diameter fiberglass rod
> and I cannot find any locally. Anybody have some left-over pieces that
> they might sell?? Tnx in advance.
>
> Gary

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Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2466. Re: Multi band scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 01:14:02 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <412E8B22.2AAFCD23@shaw.ca>
Source record: 90288

"Ron, KC4YOY" wrote:
>
> I'm looking for ideas for a home built multi band
> scanner antenna.
> I'm thinking about one with separate whips
> cut for each band.
>
> Anyone got any good ideas?
>
> 73, Ron
>
I assume, possibly incorrectly, that it is a VHF/UHF scanner. It would
be much simpler to build a discone -- even just a skeleton discone would
probably do the trick.

Irv

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2467. Re: Signal Strength Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 01:15:15 UTC
From: Drink <drink@gnt.net>
Message-ID: <cgm1qalaf1@news.utelfla.com>
Source record: 90287

Well, you're right that the group's dedicated to ham radio-type antennas
but I'll still give a try. Don't know how many floors up to your roof but,
at 43 plus floors, you'd get awesome reception I suspect if you just put a
real antenna on the roof and ran the line down to your office. You might
not even need a fancy one like winegard makes or any other beam antenna
readily available at Radio Shack. Take a look at 1) where the TV station is
that you're looking for and 2) how far away it is. Now, compare that to how
acceptable the reception is with your rabbit ears is. Take a look at this
website.
http://www.starkelectronic.com/allant.htm
They make some good omnidirectional antennas for your application with a
preamplifier. That might do the trick. Make sure you do your own research
based on your particulars that I'm not aware of. Better yet, give 'em a
call. They're experts on this one:).
Best Regards,
Jim,WP3JQ
"Nickolas" <charasmatic_joker@yahoo.com> wrote in message
news:8db044f9.0408112155.3f4ce10e@posting.google.com...
> This is probably not the right group for this question...but you guys
> are the experts on antennas so I thought I would throw my question out
> there...
> I am in an office building (43rd floor) and I was wondering some tips
> on getting television reception to come in clearer? I have a basic
> bunny ears antenna but the picture is very fuzzy and fades...this is
> almost certainly because of the building. Is there anything I can do
> to make the picture come in clearer?
> Thanks,
> Nickolas

2468. WTB: Cushcraft CRX-450B

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 01:21:03 UTC
From: edflicek@wmconnect.com
Message-ID: <20040826212103.26512.00004246@mb-m03.wmconnect.com>
Source record: 90289

I am looking for the above antenna for my commercial radio.

Thanks,

Ed

2469. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 02:16:43 UTC
From: richardharrison@webtv.net
Message-ID: <28499-412E998B-302@storefull-3256.bay.webtv.net>
Source record: 90290

Yuri, K3BU wrote:
"If anybody cares to discuss the subject, or explain how the conductor laid on the ground can lose its conductivity, bring it on."

"Lose its conductivity" is likely a mischaracterization.

Conductivity of a wire at a particular temperature and frequency is a function of the form, size, and material the wire is made of.

Proximity of the earth should not affect conductivity directly.

Loss from an R-F carrying conductor can come from energy coupled into the surroundings. Obvious source is the R-F in the conductor. Closer the conductor comes to the earth, the higher its capacitive coupling, and the more current flows in the lossy earth, especially in the case of an unbalanced conductor.

The fact that a conductor laid on the ground can lose R-F does not mean it lost conductivity. It means the conductor has induced loss in the ground upon which it is laid.

Best regards, Richard Harrison, KB5WZI

2470. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 02:23:02 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412e9c7d$1_7@corp.newsgroups.com>
Source record: 90291

Tom Donaly wrote:
> Current waves can travel in two directions at the same time. Charge
> can't.

Quoting Kraus: "A coil can also act as a 180 degree phase
shifter ..." Exactly how does a coil act as a 180 degree
phase shifter if charge cannot travel in two directions?
Seems that you also don't comprehend the nature of a
distributed network such as a bugcatcher loading coil.

> For a guy who doesn't seem to be able to make the distinction,
> you don't have any business criticizing Tom Rauch's understanding of
> the situation.

So you believe that charge density is constant throughout
an RF distributed network?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2471. Bkuetooth headset mic combination info wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 02:29:44 UTC
From: Jim <Jim@telnet.com>
Message-ID: <s0xXc.240480$eM2.60375@attbi_s51>
Source record: 90292

Do any of you know where I can find or buy a Bluetooth enabled headset microphone combination? I want to primarily use it for my laptop. I can't seem to find it in any of my searches.
Thanks for your help.
73's

2472. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 02:43:58 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412ea165_7@corp.newsgroups.com>
Source record: 90294

Yuri Blanarovich wrote:
> BTW Tom used EZnec to "prove" that current across the loading coil in the
> loaded antenna is the same at both ends. When you replace that coil with same
> inductance value loading stub, you find that current is (significantly)
> different at the ends of the stub.
> Have you corrected him how to use EZnec properly to model lumped inductance and
> get results that jive with reality? Cecil showed and explained the stuff. In
> his presentation at Dayton, Tom still propagated that nonsense.

I'm going to add this to my web page. It's a mobile antenna with an 4'
bottom section, a loading coil, and an 4' whip. The loading coil is
made up of EZNEC segments with an octal shape. It is 4.5 turns in 0.9
foot length and one foot diameter. The feedpoint current is 1 amp.
The current in the first segment at the bottom of the coil is
0.9956 amps. The current in the last segment at the top of the the
coil is 0.5326 amps. The number of electrical degrees that the coil
occupies is about 50 degrees, more than half of the 90 degree antenna.
--
73, Cecil http://www.qsl.net/w5dxp

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-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2473. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 02:44:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <at7ti0dfoou2hdhb1drr92amauhja2i0id@4ax.com>
Source record: 90293

On Thu, 26 Aug 2004 21:23:02 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:
>charge cannot travel in two directions?
:-)

2474. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 02:54:14 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <qnxXc.11485$%11.9156@trnddc02>
Source record: 90295

"On a different note Yuri, what's new with the transceiver??
Dale W4OP

2475. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:01:17 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412ea574_7@corp.newsgroups.com>
Source record: 90297

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>charge cannot travel in two directions?
>
> :-)

Charge travels in two directions 1/2WL apart
in a transmission line. Why is that funny?
--
73, Cecil http://www.qsl.net/w5dxp

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2476. Re: Multi band scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:05:48 UTC
From: Peter Parker <parkerp@NOSPAMalphalink.com.au>
Message-ID: <412ea387@news.alphalink.com.au>
Source record: 90296

"Irv Finkleman" <finkirv@shaw.ca> wrote in message
news:412E8B22.2AAFCD23@shaw.ca...

> > I'm looking for ideas for a home built multi band
> > scanner antenna.

You could do worse than a 1/4 wave groundplane for approx 160 MHz. It will be 3/4 wave on 480 MHz as well and thus reasonably efficient.

73, Peter VK3YE

2477. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:18:43 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040826231843.00126.00001974@mb-m10.aol.com>
Source record: 90298

Original W8JI post:
<"The only thing that prevents people from shooting themselves
in the foot with the wire below the Beverage is the wire
couples to the lossy media below it so well it becomes very
lossy, and of course that means it doesn't help with
stability or termination.">

>Yuri, K3BU wrote:
>"If anybody cares to discuss the subject, or explain how the conductor
>laid on the ground can lose its conductivity, bring it on."
>
>"Lose its conductivity" is likely a mischaracterization.

"Becomes very lossy" or paraphrased "lose its conductivity" to make the point?

>Conductivity of a wire at a particular temperature and frequency is a
>function of the form, size, and material the wire is made of.

QSL.

>Proximity of the earth should not affect conductivity directly.

QSL

>Loss from an R-F carrying conductor can come from energy coupled into
>the surroundings. Obvious source is the R-F in the conductor. Closer the
>conductor comes to the earth, the higher its capacitive coupling, and
>the more current flows in the lossy earth, especially in the case of an
>unbalanced conductor.

I can see conductor (assuming insulated wire) having its electrical length
affected by the capacitance between wire and earth, but wouldn't current stay
close to same along the length? So, like if we have a coax, which has quite a
capacitive coupling between the center conductor and shield, we would lose
(significant) RF current at the other end?

>The fact that a conductor laid on the ground can lose R-F does not mean
>it lost conductivity. It means the conductor has induced loss in the
>ground upon which it is laid.

(or improved conductivity?)
Isn't it really case of two (resistive) conductors in parallel? Wire and dirt,
with less resistance wire taking over? Why do we use radials if the conductors
become lossy? Why does the Beverage laid on the ground work?
I can see conductor as a (resonant) RF circuit becoming "detuned" and affected
by earth proximity, but saying that it "becomes very lossy" is not very
descriptive. With two wire Beverage I can see the interference between two

"antennas" having same physical length, but different electrical lengths
causing deterioration of pattern (which is observed).

Cecil help? :-)

>
>Best regards, Richard Harrison, KB5WZI
>

Yuri, K3BU

2478. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:36:20 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412eadac$1_7@corp.newsgroups.com>
Source record: 90300

Cecil Moore wrote:
> I'm going to add this to my web page. It's a mobile antenna with an 4'
> bottom section, a loading coil, and an 4' whip. The loading coil is
> made up of EZNEC segments with an octal shape. It is 4.5 turns in 0.9
> foot length and one foot diameter. The feedpoint current is 1 amp.
> The current in the first segment at the bottom of the coil is
> 0.9956 amps. The current in the last segment at the top of the the
> coil is 0.5326 amps. The number of electrical degrees that the coil
> occupies is about 50 degrees, more than half of the 90 degree antenna.

Darn, should have been:
--
73, Cecil http://www.qsl.net/w5dxp/octcoil.gif

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2479. Re: Multi band scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:40:49 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <R2yXc.29275$cx.24251@bignews4.bellsouth.net>
Source record: 90299

I vote for the Discone -
1 discone will work at the design band and higher freqs too
no need for multiple antennas

"Ron, KC4YOY" <kc4yoy@carolina.rr.con> wrote in message
news:R%uXc.3001$6h6.246718@twister.southeast.rr.com...
> I'm looking for ideas for a home built multi band
> scanner antenna.
> I'm thinking about one with separate whips
> cut for each band.
>
> Anyone got any good ideas?
>
> 73, Ron
>
> ----------
> C.R."Ron"Lawrence KC4YOY
> Antique Radio Collector & Historian
> kc4yoy(at)carolina.rr.com
>
> POBox 3015
> Matthews, NC 28106-3015
> 704-289-1166 (home)
>
> Radio Collection Web Page,
> http://www.radioheaven.homestead.com
> Clough-Brengle equipment web page
> http://CloughBrengle.homestead.com
> CC-AWA Web Page,
> http://www.cc-awa.org
> TCA Tube Photo Gallery,
> http://radioheaven.homestead.com/TCA.html
> SuperHet web page,
> http://radioheaven.homestead.com/superhets.html
>
>

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Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2480. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:53:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1sbti0535nmnedjkp3utpfc7m7t85kfiif@4ax.com>
Source record: 90301

On Thu, 26 Aug 2004 22:01:17 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:
>Why is that funny?

There is no charge with a physical dimension of 1/2WL :-)

2481. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 03:56:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h1cti0ljdt4csrlcirt9deo0ji5j5587oh@4ax.com>
Source record: 90302

On 27 Aug 2004 03:18:43 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich) wrote:

>With two wire Beverage I can see the interference between two
>"antennas" having same physical length, but different electrical lengths
>causing deterioration of pattern (which is observed).

Hi Yuri,

As this is not demonstrated (significantly) through EZNEC in my models, perhaps you can provide your model that does?

73's
Richard Clark, KB7QHC

2482. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 04:00:15 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <jlyXc.8588$QJ3.5813@newssvr21.news.prodigy.com>
Source record: 90303

Cecil Moore wrote:
> Tom Donaly wrote:
>
>> Current waves can travel in two directions at the same time. Charge
>> can't.
>
>
> Quoting Kraus: "A coil can also act as a 180 degree phase
> shifter ..." Exactly how does a coil act as a 180 degree
> phase shifter if charge cannot travel in two directions?
> Seems that you also don't comprehend the nature of a
> distributed network such as a bugcatcher loading coil.
>
>> For a guy who doesn't seem to be able to make the distinction,
>> you don't have any business criticizing Tom Rauch's understanding of
>> the situation.
>
>
> So you believe that charge density is constant throughout
> an RF distributed network?
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

A charge defined at one point can go one direction or another, Cecil,
as in current, but not two opposing directions at once. And quit telling
me what
I believe; I'll tell you. Let me say in terms you might get this time:
The same infinitesimal charge dQ cannot move in two directions
at the same time. In order to do that it would have to split in two
and that would violate the principle of conservation of charge.
73,
Tom Donaly, KA6RUH

2483. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 04:16:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10itdcjqm24l358@corp.supernews.com>
Source record: 90304

Richard Clark wrote:
> . . .
> However, Beverages are not typically the first choice for
> transmission, but rather reception. Does reciprocity hold? As no one
> has offered to help the Little Red Hen, would they care to share in
> the cake?
>
> For the receive single wire Beverage @ 10ï¿½ w/600 Ohm load
> Total load power = 5.543E-07 watts
>
> For the receive double wire Beverage @ 10ï¿½ w/600 Ohm load
> Total load power = 6.623E-07 watts
>
> Now, if we compare the two receive loads we find they differ by .77dB
> which is the same difference for the transmission models. By most
> accounts, that means reciprocity prevails. By further accounts, that
> means the double wire system is superior - if you want to lay out 1000
> meters of wire for less than one dB (that pesky one dB value judgment
> again).
> . . .

You wouldn't modify a Beverage or any HF receiving antenna to get more gain. The whole object is directivity. If you need more gain, turn up the receiver gain control.

Of course reciprocity prevails. But at HF, the important criteria are different for transmitting and receiving. When transmitting, it's gain; when receiving, it's directivity. The Beverage is poor in the first category but good in the second -- it's a good receiving antenna but a poor transmitting antenna.

Incidentally, Tom W8JI and I worked out a way some time ago to get directivity information from EZNEC. You can see an example at http://www.w8ji.com/receiving_basics.htm in the discussion about Beverages.

Roy Lewallen, W7EL

2484. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 04:27:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rkdti0dfsjbnn16bvbahqql6qmbm6h83o7@4ax.com>
Source record: 90305

On Thu, 26 Aug 2004 21:16:14 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Richard Clark wrote:
>> . . .
>> However, Beverages are not typically the first choice for
>> transmission, but rather reception. Does reciprocity hold? As no one
>> has offered to help the Little Red Hen, would they care to share in
>> the cake?
>>
>> For the receive single wire Beverage @ 10ï¿½ w/600 Ohm load
>> Total load power = 5.543E-07 watts
>>
>> For the receive double wire Beverage @ 10ï¿½ w/600 Ohm load
>> Total load power = 6.623E-07 watts
>>
>> Now, if we compare the two receive loads we find they differ by .77dB
>> which is the same difference for the transmission models. By most
>> accounts, that means reciprocity prevails. By further accounts, that
>> means the double wire system is superior - if you want to lay out 1000
>> meters of wire for less than one dB (that pesky one dB value judgment
>> again).
>> . . .
>
>You wouldn't modify a Beverage or any HF receiving antenna to get more
>gain. The whole object is directivity. If you need more gain, turn up
>the receiver gain control.

If you will note above, there is nothing stated in terms of gain.

>Of course reciprocity prevails. But at HF, the important criteria are
>different for transmitting and receiving. When transmitting, it's gain;

If you will note in the original posting (the content that has been
edited out here) I do employ the term gain - however only as an
informal comparison.

>when receiving, it's directivity. The Beverage is poor in the first
>category but good in the second -- it's a good receiving antenna but a
>poor transmitting antenna.

That has been attended to several times.

>Incidentally, Tom W8JI and I worked out a way some time ago to get
>directivity information from EZNEC. You can see an example at
>http://www.w8ji.com/receiving_basics.htm in the discussion about Beverages.

Hi Roy,

That's nice. Do you have anything that resolves Yuri's "problem?"
More to the matter, does anyone know what that "problem" is? If it is
merely semantics (as the discussion seems to have evolved into), then
perhaps this matter is more suitable to rec.radio.amateur.linguistics.

73's
Richard Clark, KB7QHC

2485. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 04:32:16 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040827003216.04837.00001893@mb-m12.aol.com>
Source record: 90306

>
>Hi Yuri,
>
>As this is not demonstrated (significantly) through EZNEC in my
>models, perhaps you can provide your model that does?
>
>73's
>Richard Clark, KB7QHC
>

I do not have EZNEC model, but you can read up the thread at
http://lists.contesting.com/archives/html/Topband/2004-08/index.html
and look for 2 wire beverages tec.
Someone tested single wire Beverage and then laid "return" wire underneath on
the ground and noticed deterioration of F/B and higher angle lobes.

Yuri

2486. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 06:18:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jujti0ppoafu9i54kbhmuodam0ee7nk5ce@4ax.com>
Source record: 90307

On 27 Aug 2004 04:32:16 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:

>I do not have EZNEC model, but you can read up the thread at
>http://lists.contesting.com/archives/html/Topband/2004-08/index.html
>and look for 2 wire beverages tec.
>Someone tested single wire Beverage and then laid "return" wire underneath on
>the ground and noticed deterioration of F/B and higher angle lobes.
>
Hi Yuri,

This is like offering an encyclopedia and saying an article about some
famous guy is in there.

Never mind. The data speaks for itself - less than a dB difference.

73's
Richard Clark, KB7QHC

2487. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 06:20:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgmjrg$e3d$1@titan.btinternet.com>
Source record: 90308

The only thing wrong with the Autek is its internal oscillator has only a few microwatts output. And for the few components inside it, it is overpriced.

Reg

2488. Cushcraft AP8A vertical - SWR problems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 07:24:41 UTC
From: spam.for.the@buerotiger.de
Message-ID: <2p85tpFi44nsU1@uni-berlin.de>
Source record: 90309

Hi there,

For the last couple of years I have been running this 8-band vertical and I have been quite happy with it - so far.

In the last couple of weeks, however, the SWR has gotten worse and worse on several bands, 30, 20, 17 and 15 in particular (1:3 or higher). Since 80 and 40 are absolutely fine in terms of SWR and performance, I supect that /something/ went wrong with the traps of the bands in question (maybe water inside), but I have no idea what to do about it.

The antenna is on top of an appartment building, attached to a chimney with lots of radials for each band. I'd like to get it fixed before the winter season and wonder whether any of you have had similiar problems and what can be done about it.

Peter Lemken
DF5JT
Berlin

--
Life is not a journey to the grave with the intention of arriving safely in a pretty and well-preserved body, but rather to skid in broadside, thoroughly used up, totally worn out and loudly proclaiming, 'Wow, what a ride!'

2489. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 08:54:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ittm9qabkm18a@corp.supernews.com>
Source record: 90310

Richard Clark wrote:
>
> Hi Roy,
>
> That's nice. Do you have anything that resolves Yuri's "problem?"
> More to the matter, does anyone know what that "problem" is? If it is
> merely semantics (as the discussion seems to have evolved into), then
> perhaps this matter is more suitable to rec.radio.amateur.linguistics.
>
> 73's
> Richard Clark, KB7QHC

I've already said all I have to say about Yuri's problems.

Roy Lewallen, W7EL

2490. Re: Cushcraft AP8A vertical - SWR problems

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 13:12:04 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <EqGXc.324047$%_6.41044@attbi_s01>
Source record: 90311

"Peter Lemken" <spam.for.the@buerotiger.de> wrote in message
news:2p85tpFi44nsU1@uni-berlin.de...
> Hi there,
>
> For the last couple of years I have been running this 8-band vertical and
> I
> have been quite happy with it - so far.
>
> In the last couple of weeks, however, the SWR has gotten worse and worse
> on
> several bands, 30, 20, 17 and 15 in particular (1:3 or higher). Since 80
> and
> 40 are absolutely fine in terms of SWR and performance, I supect that
> /something/ went wrong with the traps of the bands in question (maybe
> water
> inside), but I have no idea what to do about it.
>
> The antenna is on top of an appartment building, attached to a chimney
> with
> lots of radials for each band. I'd like to get it fixed before the winter
> season and wonder whether any of you have had similiar problems and what
> can
> be done about it.
>
>
> Peter Lemken
> DF5JT
> Berlin

Peter -

Check traps for water infiltration into traps.

w9gb

2491. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 13:18:23 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10iud2ughc3pa54@corp.supernews.com>
Source record: 90313

I use a GR 1606A when its capabilities are needed. I even salvaged another from being scraped so I have a back-up.
However, for most tasks, I find that the AEA VIA is the cat's meow. For instance, when trying to tune a Matchbox to strange frequencies, the VIA tells one which way things are going.
I have not tried to use the VIA in the presence of strong broadcast transmitters. At work, we have HP (Agelent) network analyzers and standards to use as comparisons.
AEA also makes, and I use, a modest TDR that is good enough to be used to keep track of transmission lines, connectors, and in-line protection devices.

As Roy, and others, have said: when you need a GR, you need a GR. Before I bought a 1606, I was once loaned the 900 something predecessor to the 1606. This instrument is inside of a small, copper lined suitcase and the particular instrument had been used by the military since about WW2. The outside showed use. It was spot on with my standards and, when I opened up the case, the insides were still bright and shinny. GR made quality instruments.
Though I have not used it, somewhere I have a Delta bridge that was given to me.

Go for the VIA for HF. You will not be disappointed.

73, Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10isec4dn2qb331@corp.supernews.com...
> I have an MFJ 269 and a GR 1606A. Each has its place.
>

2492. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 13:18:51 UTC
From: John Passaneau <jxp16@psu.edu>
Message-ID: <cgncbs$o8m$1@f04n12.cac.psu.edu>
Source record: 90312

Hi Guys:

Try the gray plastic conduit use in electrical wiring. It's no stronger than plumbing PVC pipe but it stands up to the weather better and its cheaper than plumbing pipe around here.

--
John Passaneau, W3JXP
Penn State University
w3jxp@arrl.net

"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote in message news:aa5vuNOSPAM-03E91E.10235026082004@newssvr22-ext.news.prodigy.com...
> In article <20040825201845.18203.00002099@mb-m03.aol.com>,
> k9sqg@aol.com (K9SQG) wrote:
>
> > I used PVC improvised standoffs for my shunt fed tower.
>
> I just got down from the scary-as-hell trip up the tower. The wind was
> really blowing up on top. I stripped the old stuff and will have to go
> back once I figure out what is need. The 3 foot (~2 foot past the tower)
> wooden stand off I used last time was pretty wx-worn. I don't think PVC
> is strong enough and the sun eats the the PVC stuff up. May have to use
> a good hard wood again. It will probably out last me. Still not sure how
> to secure the Inverted-L antenna wire to the stand off on top. It needs
> to be tied off so it will not slip at the bend.
>
> I am getting too old to climb a 22+ year old tower. Everything looked
> okay...I just wanted to get down.

2493. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 16:11:36 UTC
From: richardharrison@webtv.net
Message-ID: <25892-412F5D38-38@storefull-3251.bay.webtv.net>
Source record: 90314

Yuri, K3BU wrote:
"I can see conductor (assuming insulated wire) having its electrical length affected by the capacitance between wire and earth, but wouldn`t current stay close to same along the length?"

Depends on distance from the source. Current fades fast close to the source, but at a great distance, the decline is very slow.

Traveling waves don`t require a complete electrical circuit for propagation. They travel well in a complete void. So, the volts and amps far from the wave source don`t need to equal those at the source.

V=frequency times wavelength always prevails. So, capacitance between wire and earth for a given frequency changes the wavelength because the velocity of the wave is changed (slowed) by proximity of the earth.

As a traveling wave is free to be attenuated in travel, current must decline enroute. Brown, Lewis, & Epstein, the 20th Century RCA geniuses, declared that the place to end extending ground radials is where their current becomes insignificant.

Yuri also wrote:
"Why do we use radials if the conductors become lossy?"
Yuri also had answered the question before asking. Didn`t Johnny Carson patent that routine, holding the question envelope to his head while he gave the answer?
Yuti`s answer: "Wire and dirt, with less resistance wire taking over."

Yuri also wrote:
"Why does the Beverage laid on the ground work?"

Kraus says a wave traveling along a perfect conductor produces an electric field perpendicular to the conducting surface, but along the earth the electric field has a forward tilt. The horizontal component of the vertical wave produced by the tilt is associated with that part of the wave that enters the surface and is dissipated as heat. The vertical component of the wave continues to travel along the surface. The emfs induced along the antenna by the horizontal component made of the tilt, all add up in the same phase at the receiver. Maximum response is in the direction of the horizontal wire.

Best regards, Richard Harrison, KB5WZI

2494. Re: "SteppIR" patent application

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 16:18:03 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <%8JXc.3857$6h6.311057@twister.southeast.rr.com>
Source record: 90315

"Minnie Bannister" <GoonButNotForgotten@NottheBBC.org> wrote in message
news:10il33m2mvrjn70@corp.supernews.com...
> www.steppir.com
>
> Alan NV8A
>
>
> On 08/23/04 04:23 pm Jimmie put fingers to keyboard and launched the
> following message into cyberspace:
>
> >>>How is it I get the feeling they are not trying to develope the
remotely
> >>>tunable antenna. Seem to me someone just wants to have the patent on
the
> >>>idea
>
> >>Huh?
> >>They developed it, making it and selling like a hotcakes. That's the
idea,
> >
> > to
> >
> >>have a patent on the idea for terrific product!
>
> > Really, didnt know the things were on the market.
Gives me an idea for a stealth antenna. Make a neat flag pole
antenna.Variable length element inside a fiberglass flagpole. Actually this
has been done already using rope and pulley , manually operated. Time for an
update on an old idea. Stepper motors.

2495. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 17:06:35 UTC
From: richardharrison@webtv.net
Message-ID: <5855-412F6A1B-99@storefull-3257.bay.webtv.net>
Source record: 90316

Darrell, W4CX wrote:
"V/UHF is my priority since I`m building some copper loops for 6 and 2."

In the U.S., General Radio is champion. But, in Europe we used a British Wayne Kerr UHF admittance bridge on lines and antennas in the middle of a high frequency broadcast plant with a dozen or more competing transmitters on the air at full power, as they always were.

The secret of success is the bridge detector used. A Collins 51-J was useless, solid noise across the H-F bands. A Hammarlund SP-600 worked like a champ.

Best regards, Richard Harrison, KB5WZI

2496. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 18:33:08 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <g0vui0pt4i6580ujjte0ln4va1fbj5t1o4@4ax.com>
Source record: 90317

On Fri, 27 Aug 2004 09:18:23 -0400, "J. McLaughlin" <JCM@Power-Net.Net> wrote:
>snip
>
> As Roy, and others, have said: when you need a GR, you need a GR.
>Before I bought a 1606, I was once loaned the 900 something predecessor
>to the 1606. This instrument is inside of a small, copper lined
>suitcase and the particular instrument had been used by the military
>since about WW2. The outside showed use. It was spot on with my
>standards and, when I opened up the case, the insides were still bright
>and shinny. GR made quality instruments.
>snip
>
> 73, Mac N8TT

Hi Mac,

The predecessor to the GR-1606A was the GR-916A, which was the cadillac of professional bridges prior to the GR-1606A, which came out in 1955. I used the 916A to adjust the tower resistance of WCEN, 1150 kHz, the station I engineered and built in 1948. The National HRO receiver was used as the detector.

Walt, W2DU

2497. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 18:44:29 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <pjvui0p11832m7k6lqgrab4l6cr9aqjltp@4ax.com>
Source record: 90318

On Fri, 27 Aug 2004 12:06:35 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Darrell, W4CX wrote:
>"V/UHF is my priority since I`m building some copper loops for 6 and 2."
>
>In the U.S., General Radio is champion. But, in Europe we used a British
>Wayne Kerr UHF admittance bridge on lines and antennas in the middle of
>a high frequency broadcast plant with a dozen or more competing
>transmitters on the air at full power, as they always were.
>
>The secret of success is the bridge detector used. A Collins 51-J was
>useless, solid noise across the H-F bands. A Hammarlund SP-600 worked
>like a champ.
>
>Best regards, Richard Harrison, KB5WZI

Hi Richard,

Interesting you mentioned the Wayne Kerr UHF bridge. In my impedance-measuring arsenal is the Wayne Kerr B108 admittance bridge. The beautiful aspect of this bridge is that it's unknown terminals are balanced, thus allowing direct measurement of balanced lines.

My arsenal also includes: 2 HP 8405 Vector Voltmeters with HP-778D dual directional coupler.
HP-4815 Vector Impedance Meter
GR-1606A
GR-1606B
Boonton 250A Impedance Meter
PRD-219 Complex Reflection Coefficient Meter, 20 to 1000 MHz

What would you like me to measure?

Walt

2498. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 21:21:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10iv9fnaesqeg35@corp.supernews.com>
Source record: 90319

A very capable engineering colleage of mine mentioned some time ago that an AEA he had purchased worked very well except for one thing -- the reference point appeared to be inside the instrument. He said it was as though there were another length of line (about 5 cm as I recall) inside. For example, measurement of a short circuit would indicate the amount of positive reactance you'd expect from such a line. This might not be too important for general purpose HF use, but would be a problem with some measurements, especially at high frequencies. It could be removed by mathematical adjustment of the measurement results, of course.

I mentioned this problem to the AEA folks at Dayton, not long after it changed hands, and they might have fixed it. Do you see this phenomenon?

I saw a similar thing when I spent a few minutes playing with the very first model of Autek. I don't see this with my MFJ.

Again, the problem might have been fixed, but it's something to look for, particularly on an older used unit.

Roy Lewallen, W7EL

J. McLaughlin wrote:
> I use a GR 1606A when its capabilities are needed. I even salvaged
> another from being scraped so I have a back-up.
> However, for most tasks, I find that the AEA VIA is the cat's meow.
> For instance, when trying to tune a Matchbox to strange frequencies, the
> VIA tells one which way things are going.
> I have not tried to use the VIA in the presence of strong broadcast
> transmitters. At work, we have HP (Agelent) network analyzers and
> standards to use as comparisons.
> AEA also makes, and I use, a modest TDR that is good enough to be
> used to keep track of transmission lines, connectors, and in-line
> protection devices.
>
> As Roy, and others, have said: when you need a GR, you need a GR.
> Before I bought a 1606, I was once loaned the 900 something predecessor
> to the 1606. This instrument is inside of a small, copper lined
> suitcase and the particular instrument had been used by the military
> since about WW2. The outside showed use. It was spot on with my
> standards and, when I opened up the case, the insides were still bright
> and shinny. GR made quality instruments.
> Though I have not used it, somewhere I have a Delta bridge that was
> given to me.
>
> Go for the VIA for HF. You will not be disappointed.
>

> 73, Mac N8TT

2499. Re: Yuri true to his word

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 21:23:30 UTC
From: wa0goz@arrl.net
Message-ID: <412FA652.1459@arrl.net>
Source record: 90222

Yuri said he would send me a check for the issues I didn't get and he
was true to his word. The check came in the mail today. Thank you
Yuri.

73

Henry WA0GOZ

Yuri Blanarovich wrote:
>
> > Can you describe what is on the label, with codes if any please?
> >>
> >> Thanks, Yuri
> >
> >Sure
> >
> >WA0GOZ S
>
> You are right, I found it on the computer.Printed listings missed it, because I
> received your check on 89/06/06 after the regular 8905 issue was mailed, your
> payment arrived later, I sent you 8905 issue and it didn't show up on the
> printout. Searching computer I found it. I have mailed check with refund today.
> I am sorry for mixup, comments and above all, that I was not able to continue
> publishing and sinking money into Radiosporting. I am still hoping to scan old
> issues and perhaps continue with it on Internet (no money outlay for printing),
> but only as time permitting.
>
> I am glad we could sort thing out.
>
> 73 Yuri

2500. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 21:27:15 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10iv9ni225qpo3b@corp.supernews.com>
Source record: 90320

Dear Walt:
As I remember, and this was a long time ago, the 916's unknown port was less convenient to use than was the case with the 1606. As several have pointed out, one needs a competent detector.
For VHF/UHF work, GR had an "admittance" bridge that worked very well. Used one to tune a 400 MHz feed (of an 85 foot dish) so that the feed was resonant at two frequency bands 60 MHz apart (30 MHz IF strip).
Thanks for the memories.

A correction to what I wrote: I have a CIA-HF from AEA, not a VIA.

73 Mac N8TT

--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Walter Maxwell" <w2du@iag.net> wrote in message
news:g0vui0pt4i6580ujjte0ln4va1fbj5t1o4@4ax.com...
> On Fri, 27 Aug 2004 09:18:23 -0400, "J. McLaughlin"
<JCM@Power-Net.Net> wrote:
> >snip
> >
> > As Roy, and others, have said: when you need a GR, you need a
GR.
> >Before I bought a 1606, I was once loaned the 900 something
predecessor
> >to the 1606. This instrument is inside of a small, copper lined
> >suitcase and the particular instrument had been used by the military
> >since about WW2. The outside showed use. It was spot on with my
> >standards and, when I opened up the case, the insides were still
bright
> >and shinny. GR made quality instruments.
> >snip
> >
> > 73, Mac N8TT
>
> Hi Mac,
>
> The predecessor to the GR-1606A was the GR-916A, which was the
cadillac of
> professional bridges prior to the GR-1606A, which came out in 1955. I
used the
> 916A to adjust the tower resistance of WCEN, 1150 kHz, the station I
engineered

> and built in 1948. The National HRO receiver was used as the detector.
>
> Walt, W2DU
>

2501. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 21:57:21 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <57OXc.243$O85.84@trnddc05>
Source record: 90221

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10iv9fnaesqeg35@corp.supernews.com...
> A very capable engineering colleage of mine mentioned some time ago that
> an AEA he had purchased worked very well except for one thing -- the
> reference point appeared to be inside the instrument. He said it was as
> though there were another length of line (about 5 cm as I recall)
> inside. For example, measurement of a short circuit would indicate the
> amount of positive reactance you'd expect from such a line. This might
> not be too important for general purpose HF use, but would be a problem
> with some measurements, especially at high frequencies. It could be
> removed by mathematical adjustment of the measurement results, of course.
>
> I mentioned this problem to the AEA folks at Dayton, not long after it
> changed hands, and they might have fixed it. Do you see this phenomenon?
>
> I saw a similar thing when I spent a few minutes playing with the very
> first model of Autek. I don't see this with my MFJ.
>
> Again, the problem might have been fixed, but it's something to look
> for, particularly on an older used unit.
>
> Roy Lewallen, W7EL
>
Hi Roy,
I briefly owned the AEA V/U model- probably in 1999. Using my HP precision
termination set, it appeared that the best VHF return loss was indicated
when the analyzer was terminated in around 60 Ohms and for UHF it was 75
Ohms. When I called AEA to inquire, I was told "that's about the accuracy
you should expect for $500". The Autek V/U instrument was in excellent
agreement with an HP 8711B.

Dale W4OP

2502. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 21:59:20 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040827175920.22107.00002442@mb-m07.aol.com>
Source record: 90223

>Hi Yuri,
>
>This is like offering an encyclopedia and saying an article about some
>famous guy is in there.
>
>Never mind. The data speaks for itself - less than a dB difference.
>
>73's
>Richard Clark, KB7QHC

Not really, it is more like saying there is a word or discussion about 2 wire beverages on page so and so (last few days). Discussion was quite sizable and worth looking into for those who only play with "soft" antennas and see what experiences were gained by those who played with real antennas. It was midnight here and I was closing the shop for the day in anticipation of getting up early. I had no time to go and do the digest or get into arguments of what IS is.
Your data speaks of less than one dB, reality is bit different.
But I know, its me (problem), not the software.
Maybe a little less sarcasm would go longer way?

73 Yuri

2503. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-27 23:55:48 UTC
From: Darrell Gordon W4CX <w4cx.nospam@arrl.net>
Message-ID: <bbivi0l0nshaldeup90ih3jh8ka7jd2rps@4ax.com>
Source record: 90224

Thanks to all for a very informative thread. You guys are living up
to your reputation.
Has anyone had any experience with an HP 8754? They seem to be
around, and with a b/w of 4-1300Mhz might be an excellent choice???
Darrell

2504. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 00:40:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412fd5db$1_3@corp.newsgroups.com>
Source record: 90226

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>Why is that funny?
>
> There is no charge with a physical dimension of 1/2WL :-)

The charge on a transmission line occupies the entire transmission
line. For instance, there's absolutely nothing prohibiting us from
saying, "Two of the batteries are holding a charge." It doesn't
mean they are holding the same charge or the same charge particles.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2505. shunt inductor for 1/4 wave ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 00:43:27 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10ivl9cikkmoed8@corp.supernews.com>
Source record: 90225

Hi all...
I have converted an old cb antenna to an elevated 1/4 wave ground plane cut for 20 meters. I know I can use a 5 watt 100,000 ohm resistor to shut static discharges to ground. How many turns of no 14 enamel wire around a T200 core would it take to do the same job?
thanks in advance, de Denton WB7TDG

2506. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 00:45:38 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412fd72c$1_3@corp.newsgroups.com>
Source record: 90227

Richard Harrison wrote:

> Yuri, K3BU wrote:
> "I can see conductor (assuming insulated wire) having its electrical
> length affected by the capacitance between wire and earth, but wouldn`t
> current stay close to same along the length?"
>
> Depends on distance from the source. Current fades fast close to the
> source, but at a great distance, the decline is very slow.

Maybe one could coil the wire into a big helical coil where the
current-in is equal to the current-out. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2507. Re: Yuri true to his word

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 00:48:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <412fd7c7$1_3@corp.newsgroups.com>
Source record: 90228

wa0goz@arrl.net wrote:
> Yuri said he would send me a check for the issues I didn't get and he
> was true to his word. The check came in the mail today.

Hey Yuri, I didn't get any issues either. Send me a check. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2508. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 01:44:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <snovi0hsaf88oov59pt9b63pu6jen7oodj@4ax.com>
Source record: 90229

On Fri, 27 Aug 2004 19:40:01 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>The charge on a transmission line occupies the entire transmission
>line.

Next you will be saying it is a Visa Charge. Or is it Master Card for
transmission lines? :-)

2509. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 03:50:53 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10j006s9uvqffad@corp.supernews.com>
Source record: 90230

Dear Roy:
Very interesting!
It just did not occur to me to test. Now that the EMC book I have
been helping with is finally being printed (over ten years in the
crafting) I shall put an appraisal of the AEA on our list of activities.
It occurs to me that almost all of my use of the instrument has been
below about 10 MHz. At those frequencies, my suspicions probably were
not tripped by a discrepancy of half a degree (or smaller).
I did buy the instrument after at least one change of hands.
Thank you very much for the heads-up. I am shaking my head in
wonder that that property I never thought to check.
Warm regards, Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10iv9fnaesqeg35@corp.supernews.com...
> A very capable engineering colleage of mine mentioned some time ago
that
> an AEA he had purchased worked very well except for one thing -- the
> reference point appeared to be inside the instrument. He said it was
as
> though there were another length of line (about 5 cm as I recall)
> inside. For example, measurement of a short circuit would indicate the
> amount of positive reactance you'd expect from such a line. This might
> not be too important for general purpose HF use, but would be a
problem
> with some measurements, especially at high frequencies. It could be
> removed by mathematical adjustment of the measurement results, of
course.
>
> I mentioned this problem to the AEA folks at Dayton, not long after it
> changed hands, and they might have fixed it. Do you see this
phenomenon?
>
> I saw a similar thing when I spent a few minutes playing with the very
> first model of Autek. I don't see this with my MFJ.
>
> Again, the problem might have been fixed, but it's something to look
> for, particularly on an older used unit.
>
> Roy Lewallen, W7EL
>

2510. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 06:26:16 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <3YyBLxCIWCMBFAIK@ifwtech.co.uk>
Source record: 90231

J. McLaughlin wrote:
>
>"Roy Lewallen" <w7el@eznec.com> wrote in message
>news:10iv9fnaesqeg35@corp.supernews.com...
>> A very capable engineering colleage of mine mentioned some time ago
>that
>> an AEA he had purchased worked very well except for one thing -- the
>> reference point appeared to be inside the instrument. He said it was
>as
>> though there were another length of line (about 5 cm as I recall)
>> inside. For example, measurement of a short circuit would indicate the
>> amount of positive reactance you'd expect from such a line. This might
>> not be too important for general purpose HF use, but would be a
>problem
>> with some measurements, especially at high frequencies. It could be
>> removed by mathematical adjustment of the measurement results, of
>course.
>>
>> I mentioned this problem to the AEA folks at Dayton, not long after it
>> changed hands, and they might have fixed it. Do you see this
>phenomenon?
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>> I saw a similar thing when I spent a few minutes playing with the very
>> first model of Autek. I don't see this with my MFJ.
>>
>> Again, the problem might have been fixed, but it's something to look
>> for, particularly on an older used unit.

>Dear Roy:
> Very interesting!
> It just did not occur to me to test. Now that the EMC book I have
>been helping with is finally being printed (over ten years in the
>crafting) I shall put an appraisal of the AEA on our list of activities.
> It occurs to me that almost all of my use of the instrument has been
>below about 10 MHz. At those frequencies, my suspicions probably were
>not tripped by a discrepancy of half a degree (or smaller).
> I did buy the instrument after at least one change of hands.
> Thank you very much for the heads-up. I am shaking my head in
>wonder that that property I never thought to check.
> Warm regards, Mac N8TT

A few years ago, I was evaluating an AEA-CIA for a possible magazine review. One of the tests involved a load consisting of some metres of 50 ohm coax terminated in three paralleled 50 ohm chip resistors. When the frequency is swept, this load walks around the SWR=3 circle on a Smith

chart, giving |Z| values ranging between 16 ohms and 150 ohms with a progressively rotating phase; or equivalent results in terms of (R+/-jX). In other words, the test involves only moderately high or low impedances with no nasty surprises.

The AEA-CIA gave good results as a frequency-sweeping SWR meter, and the graphical display is unique in this price range; but unfortunately but it did not give sensible results in the R-X mode (the mode that gives the "Complex Impedance Analyser" its name). In a frequency range where the true value of X was falling progressively through zero, the indicated value came down correctly to about 30 ohms - and then suddenly jumped to 0.0. The R readings continued to change with frequency exactly as expected, but the X reading stayed 'stuck' at precisely 0.0 until the sweep reached the frequency at which X changed sign, whereupon the X readings started to make sense again. This behaviour was totally reproducible. Also, the AEA-CIA is also supposed to be able to resolve the sign of the complex impedance (which it presumably does by changing frequency and noting what happens to X), but perhaps not surprisingly this didn't work reliably either. At a constant frequency where the value of X was nowhere close to zero, the instrument was often unable to make up its mind about the correct sign.

All these symptoms looked like firmware problems to me. Since R and X are both computed from the same analog voltage readings, and R was correct while X was not, the problem had to be in the computation. The AEA management at the time were quick to respond through the UK dealer. They sent me schematics, and analog-type mods to try, and even replaced the entire instrument... which behaved exactly like the one before. However, they didn't seem to understand what I just wrote above, and didn't want to go anywhere near the firmware.

In the end, I abandoned the effort and the UK dealer didn't import the instrument. The magazine decided we should review the MFJ-269 instead - which handled the same test load with good accuracy.

Sorry, I don't recall what specific firmware versions gave these problems with the AEA-CIA, and have no information whether they have been fixed in later versions. As Roy said:

>> the problem might have been fixed, but it's something to look
>> for, particularly on an older used unit.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2511. Re: Multi band scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 07:23:33 UTC
From: Paul Jordan <pauljordan@gci.net>
Message-ID: <10j0cs3ifuq3rfe@corp.supernews.com>
Source record: 90232

I've got a 2', more or less, antenna on my truck that works REAL nice on all the bands my scanner will pick up.. I think it's an RT7 or RX7, somethin like that.. Real nice scanner too.. The antenna has a regular antenna thread just like a hamstick or any other popular mobile antenna..

Radio Shack sells a multi band scanner antenna that you might look at. May be able to fashion a copy from it if you're sneaky..

2512. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 11:03:11 UTC
From: DGoncz@aol.com
Message-ID: <5d8971ea.0408280303.67336680@posting.google.com>
Source record: 90233

DGoncz@aol.com (Doug Goncz) wrote in message
news:<5d8971ea.0408251642.2a1b7364@posting.google.com>...
> Dear Richard,
>
> The Radio Shack manual linked below, which I have, and came with the
> antenna, doesn't mention twiaxial cable because no twinaxial cable
> with an impedance of 75 ohms is available at a reasonable price, so
> people use 75 ohm cable because it's cheaper. If I could get 75 ohm
> twinaxial cable I'd use it.
>
> The impedance of this and every open dipole antenna is around 75 ohms,
> one quarter of the impedance of a 300 ohm folded dipole, just about
> ten percent from the impedance of empty space. We are in an
> atmosphere....
>
> However, the OEM antenna is a flexible _open_ dipole with a
> characterstic impedance of 75 ohms. I think 100 ohm twinax is a good
> choice.
>
> Can any readers source 75 ohm twinax?
>
> Doug

http://www.electronicsurplus.com/commerce/catalog/product.jsp?product_id=77543&czuid=10937
01353153

I have ordered 16 feet of Belden "Blue Hose" 78 ohm twinaxial cable.

Doug

2513. Re: shunt inductor for 1/4 wave ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 14:02:47 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <GvSdnZBj5uceDa3cRVn-ow@comcast.com>
Source record: 90234

"denton" <denton@oregontrail.net> wrote in message
news:10ivl9cikkmoed8@corp.supernews.com...
> Hi all...
> I have converted an old cb antenna to an elevated 1/4 wave ground plane
cut
> for 20 meters. I know I can use a 5 watt 100,000 ohm resistor to shut
static
> discharges to ground. How many turns of no 14 enamel wire around a T200
core
> would it take to do the same job?
> thanks in advance, de Denton WB7TDG
>
>
Depends on the core material. T200-WHAT?. Generally, you would want the coil impedance to be at least 10 times the antenna impedance. So, for a 37 Ohm antenna, 370 Ohms. The coil impedance X(L) at 14 MHz is:

X(L) = 6.28 * 14E6 * L

or L = 370/(6.28 * 14E6)

If you ignore the E6, the answer will be in microhenries. So, L=370/(6.28 * 14) = 4.2uH. You will have to look at the chart for your core to see how many turns that takes. For the common T200-2 core, it will be 19 turns, which might not fit. So, use #18 wire - there's very little current flowing through it.

Tam/WB2TT

2514. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 15:07:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4130a11a$1_8@corp.newsgroups.com>
Source record: 90236

Richard Clark wrote:
> Cecil Moore <w5dxp@hotmail.com> wrote:
>>The charge on a transmission line occupies the entire transmission
>>line.
>
> Next you will be saying it is a Visa Charge. Or is it Master Card for
> transmission lines? :-)

Have you never seen a calculation for the total electrical charge
for the entire planet earth? Charge is a concept, not a particle.
--
73, Cecil http://www.qsl.net/w5dxp

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2515. Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 15:08:10 UTC
From: Doug Birky <dgbirky@voyager.net>
Message-ID: <10j180mfagdet1d@corp.supernews.com>
Source record: 90235
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

My feedline will be abou 200'. Can I run RG-8 this far?

73
Doug/KC8YEC

2516. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 15:23:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4130a4f5_8@corp.newsgroups.com>
Source record: 90237
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Doug Birky wrote:
> My feedline will be abou 200'. Can I run RG-8 this far?

What frequency and what SWR? About 50% of your power would
be lost on 10m with a matched antenna.
--
73, Cecil http://www.qsl.net/w5dxp

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2517. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 15:34:01 UTC
From: "p.paulfriedman" <p.paulfriedman@comcast.net>
Message-ID: <JB1Yc.84332$mD.58410@attbi_s02>
Source record: 90238
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Doug:

Kinda depends. <grin>

It depends on the frequency (higher the freq, greater the loss per foot)
It depends on the SWR (higher the SWR, the greater the loss per foot)
It depends on which type of RG-8 you mean.

I suggest using http://www.ocarc.ca/coax.htm (or similar) to calculate the
loss for your run and decide on the cost/loss/ease of installation
trade-offs for yourself.

I know people who use hardline for 80m - they are SERIOUS about putting out
maximum power. They are quite happy with it. I know people who use RG-8X for
6m. They are SERIOUS about keeping costs down and making installation easy.
they are also happy with their choice.

Paul AB0SI

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10j180mfagdet1d@corp.supernews.com...
> My feedline will be abou 200'. Can I run RG-8 this far?
>
> 73
> Doug/KC8YEC
>
>

2518. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 15:37:32 UTC
From: "p.paulfriedman" <p.paulfriedman@comcast.net>
Message-ID: <0F1Yc.84347$mD.27852@attbi_s02>
Source record: 90239
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Ceal:

50? that is close to the lose for 8X. For 8/U the loss would be closer to
40% (assuming, as you did, a 1:1 VSWR).

Paul AB0SI

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4130a4f5_8@corp.newsgroups.com...
> Doug Birky wrote:
>> My feedline will be abou 200'. Can I run RG-8 this far?
>
> What frequency and what SWR? About 50% of your power would
> be lost on 10m with a matched antenna.
> --
> 73, Cecil http://www.qsl.net/w5dxp
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2519. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 16:05:15 UTC
From: "J. McLaughlin" <JCM@Power-Net.Net>
Message-ID: <10j1b7pb48aagb3@corp.supernews.com>
Source record: 90240

Dear Ian:
Most interesting. Thanks.
I have not used the AEA-CIA for R-X measurements. I always assumed that firmware was used to guess at the sign of X, and it is not too surprising (though disappointing) that the chap who wrote the software might blank out small values of X altogether. [In a spherical navigation program that I wrote long ago for a slow computer, I flagged results that would have been in the noise because of round-off error. It took some effort to know when the results were bad. Others ignored error analysis, being enamored of many random digits, with disastrous results. Sometimes, with computers, no answer is the best one can do. As an example: Cramer's rule just does not work to solve some systems of linear equations using a computer! Even the HP48 uses an iterative technique, which computers are real good at and people are not.]
The most interesting use that I made of the AEA-CIA, which would have been difficult to do with a GR bridge, was measuring the apparent surge impedance of a split boom to be used with a LPDA (prior to the elements being attached). Leaving out the appropriate lecture: I terminated the split-boom with a series of resistors 'till the variation in SWR (seen at the other end of the split-boom) with frequency was minimal. [This is another example of SWR on a line depending on which way one is looking.]

The strong suit of the AEA-CIA is in giving one repeatable data over a wide frequency range. Most of the antennas that I deal with have functional bandwidths of at least an octave. The value of the AEA-CIA is much reduced if one is only interested in what is going on in a narrow bandwidth.

Thanks very much for sharing your experience. We have once again benefited from your experience and Roy's experience. 73 Mac N8TT
--
J. Mc Laughlin - Michigan USA
Home: JCM@Power-Net.Net

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message news:3YyBLxCIWCMBFAIK@ifwtech.co.uk...
<snip>
>
>
> A few years ago, I was evaluating an AEA-CIA for a possible magazine
> review. One of the tests involved a load consisting of some metres of
50
> ohm coax terminated in three paralleled 50 ohm chip resistors. When
the

> frequency is swept, this load walks around the SWR=3 circle on a Smith
> chart, giving |Z| values ranging between 16 ohms and 150 ohms with a
> progressively rotating phase; or equivalent results in terms of
> (R+/-jX). In other words, the test involves only moderately high or
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> impedances with no nasty surprises.
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> graphical display is unique in this price range; but unfortunately but
> it did not give sensible results in the R-X mode (the mode that gives
> the "Complex Impedance Analyser" its name). In a frequency range where
> the true value of X was falling progressively through zero, the
> indicated value came down correctly to about 30 ohms - and then
suddenly
> jumped to 0.0. The R readings continued to change with frequency
exactly
> as expected, but the X reading stayed 'stuck' at precisely 0.0 until
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> sweep reached the frequency at which X changed sign, whereupon the X
> readings started to make sense again. This behaviour was totally
> reproducible. Also, the AEA-CIA is also supposed to be able to resolve
> the sign of the complex impedance (which it presumably does by
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> frequency and noting what happens to X), but perhaps not surprisingly
> this didn't work reliably either. At a constant frequency where the
> value of X was nowhere close to zero, the instrument was often unable
to
> make up its mind about the correct sign.
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> All these symptoms looked like firmware problems to me. Since R and X
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> correct while X was not, the problem had to be in the computation. The
> AEA management at the time were quick to respond through the UK
dealer.
> They sent me schematics, and analog-type mods to try, and even
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> the entire instrument... which behaved exactly like the one before.
> However, they didn't seem to understand what I just wrote above, and
> didn't want to go anywhere near the firmware.
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> instrument. The magazine decided we should review the MFJ-269
instead -
> which handled the same test load with good accuracy.
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> Sorry, I don't recall what specific firmware versions gave these
> problems with the AEA-CIA, and have no information whether they have
> been fixed in later versions. As Roy said:
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> >> the problem might have been fixed, but it's something to look
> >> for, particularly on an older used unit.
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

2520. Re: shunt inductor for 1/4 wave ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 16:15:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgqb26$cp3$1@titan.btinternet.com>
Source record: 90241

Just fill up the core with 20 awg.

2521. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 16:21:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b3c1j0lhg0rak7ubbqkpfgr9lkijtvivu7@4ax.com>
Source record: 90242

On Sat, 28 Aug 2004 10:07:10 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>for the entire planet earth?
Did you get the visa statement? Or is earth Diner's Club? :-)

2522. Re: shunt inductor for 1/4 wave ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 19:20:26 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10j1mnn29gqj644@corp.supernews.com>
Source record: 90243

I settled for 40 some odd turns of no 14 enamelled wire on the core...as
many turns as I could get on it....swr reads the same as before but the
signal to noise level is a lot better.
this will do until I homebrew a matching network...remotely controlled
variable cap and tapped inductor in parallel at feedpoint...to use the
antenna on 20 thru 10 meters. Unless someone else has a better idea.
In the past, I attached 10 and 15 meter radiators and radials on the same
antenna and it did fairly well on 10 and 15, but I think the gain and
radiation pattern will be a tad better if I go the matching network route.
"denton" <denton@oregontrail.net> wrote in message
news:10ivl9cikkmoed8@corp.supernews.com...
> Hi all...
> I have converted an old cb antenna to an elevated 1/4 wave ground plane
> cut for 20 meters. I know I can use a 5 watt 100,000 ohm resistor to shut
> static discharges to ground. How many turns of no 14 enamel wire around a
> T200 core would it take to do the same job?
> thanks in advance, de Denton WB7TDG
>

2523. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 19:27:58 UTC
From: CW <"no adddress"@spam>
Message-ID: <joGdnbGpJvQgQa3cRVn-jQ@comcast.com>
Source record: 90244
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Yes. You could run it around the planet if you wanted to.

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10j180mfagdet1d@corp.supernews.com...
> My feedline will be abou 200'. Can I run RG-8 this far?
>
> 73
> Doug/KC8YEC
>
>

2524. Re: shunt inductor for 1/4 wave ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 19:58:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fso1j01h62lk82mahil130hr3n8vrkkdbb@4ax.com>
Source record: 90245

On Sat, 28 Aug 2004 12:20:26 -0700, "denton" <denton@oregontrail.net>
wrote:
>In the past, I attached 10 and 15 meter radiators and radials on the same
>antenna and it did fairly well on 10 and 15, but I think the gain and
>radiation pattern will be a tad better if I go the matching network route.
KISS

2525. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 19:59:28 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <OXo$oPNgQOMBFAP8@ifwtech.co.uk>
Source record: 90246

J. McLaughlin wrote:
> Most interesting. Thanks.

You're welcome. Just one small point, though:

> I have not used the AEA-CIA for R-X measurements. I always assumed
>that firmware was used to guess at the sign of X, and it is not too
>surprising (though disappointing) that the chap who wrote the software
>might blank out small values of X altogether.

In case anyone's not following this closely, I had been writing about the AEA-CIA blanking out values of X less than about 30 ohms. That is not "small" by any standard, and it only happened on one side of zero. It could not possibly have been a deliberate feature of the programming.

In contrast, the MFJ-269 (and probably the 259B) does deliberately blank out small values - truly small values, that is - as X passes through zero. This occurs exactly as explained in the manual, and is exactly as it should be.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2526. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-28 21:35:27 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4130fc21_5@corp.newsgroups.com>
Source record: 90247
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

p.paulfriedman wrote:
> Ceal:
> 50? that is close to the lose for 8X. For 8/U the loss would be closer to
> 40% (assuming, as you did, a 1:1 VSWR).

You're right, of course. I looked up the 30 MHz line and the loss is
"about" 1.5 dB per 100 ft. Next time I will use a magnifying glass. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2527. Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 00:42:32 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <YD9Yc.54028$S55.37744@clgrps12>
Source record: 90248

I have a Radio Shack model HTX-100 Ten meter transceiver, brand new and have never been used, still in the box. The problem is that I do not have a microphne for
it and would like to know what other mic could be wired for this radio.
Pin input is a 8 pin connecter, would any up and down button mic work.
After searching the net I have learned that the mic for this rig has two buttons on it
For searching the memory channels, up or down.
Please help ..... Richard.

2528. antenna formula needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 00:47:55 UTC
From: mike beauchamp <mbeauchamp@cogeco.ca>
Message-ID: <VI9Yc.12796$0c.8521@read1.cgocable.net>
Source record: 90249

Can anyone tell me what the proper formula for finding a odd multiple of a wave legnth in inches would be?IM trying to build a four element vhf vertical array.
does anyone out there have a link to some dos software or java that would let me imput the frequency id like to find the odd quarter wavelength for, and it would give me a list of the diffrent multiples of the wavelegnth. or just a simple list of antenna formulas for finding the legnth in inches..
thanks mbeauchamp@cogeco.ca

2529. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 02:32:57 UTC
From: richardharrison@webtv.net
Message-ID: <5855-41314059-295@storefull-3257.bay.webtv.net>
Source record: 90250

Walter Maxwell, W2DU listed an enviable collection of impedance measuring devices. He`s prepared. Walter also wrote:
"In my impedance-measuring arsenal is the Wayne Kerr B108 admittance bridge. The beautiful aspect of this bridge is that its unknown terminals are balanced, thus allowing direct measurement of balanced lines."

Yes. Balanced unknown terminals are convenient for a commercial shortwave operator located away from the seashore. Horizontal wave polarization with balanced feedlines is economical as compared with coax for high power.

Unbalanced vertical antennas are convenient for groundwaves to extend beyond the horizon for the mediumwave broadcaster. These antennas are conveniently fed by coax of the concentric pipe or skeletal types. All groundwaves are vertically polarized. These can travel very far at low and medium frequencies. Attenuation of high frequency groundwaves is severe. There is no propagation of horizontally polarized groundwaves at all. The low-angle reflected wave is out of phase with the incident wave.

Bottom line is that shortwave broadcasters transmit from horizontal antennas and mediumwave broadcasters transmit from vertical antennas. For shortwave, the target is reached via the ionosphere. For mediumwave, the target is reached via the earth`s surface which is involved in reaching beyond the line of sight.

For a dipole, you are likely to prefer a balanced bridge. For a monopole, you are likely to prefer an unbalanced bridge.

Best regards, Richard Harrison, KB5WZI

2530. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 03:10:58 UTC
From: Tromboneboy74@webtv.net
Message-ID: <18193-41314942-41@storefull-3254.bay.webtv.net>
Source record: 90251

I have the same rig. (the later HTX-10 has a better receiver, but lacks CW) I believe the mike UNIT is limited to Radio Shack, but using the schematic you should be able to set up a remote control system like I did- boom mike clipped to headphones, footswich for tx/rx switching and pushbuttons for up/down use.

Good luck, and enjoy it- it's not a bad rig for the price! (and just wait for the sunspot count to rise again...hubba hubba!!)

"Peace is that brief moment in history when everybody stands around reloading."
Rev. Skip Heitzig

2531. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 03:26:25 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <P0cYc.56032$0o5.29956@bignews1.bellsouth.net>
Source record: 90252
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

Of course you could, but I wouldn't run it that long.
the higher the frequency, the more loss you'll have - so if you operate on 80meters the loss won't hurt 'as bad' as if you operated on 10meters or 2 meters.
move your shack up closer to the antenna - or use ladder line

"Doug Birky" <dgbirky@voyager.net> wrote in message news:10j180mfagdet1d@corp.supernews.com...
> My feedline will be abou 200'. Can I run RG-8 this far?
>
> 73
> Doug/KC8YEC
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2532. Re: Multi band scanner antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 03:30:43 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <S4cYc.56078$0o5.38822@bignews1.bellsouth.net>
Source record: 90253

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:R2yXc.29275$cx.24251@bignews4.bellsouth.net...
> I vote for the Discone -
> 1 discone will work at the design band and higher freqs too
> no need for multiple antennas
>
I chose Discone - ***Assuming the antenna needs to be 50 ohms ***
probably any long wire will work as well

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2533. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 03:43:22 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <uhcYc.108999$TI1.88820@attbi_s52>
Source record: 90254

"Richard" <reve6gte@telus.net> wrote in message
news:YD9Yc.54028$S55.37744@clgrps12...
>I have a Radio Shack model HTX-100 Ten meter transceiver, brand new and
>have
> never been used, still in the box. The problem is that I do not have a
> microphne for
> it and would like to know what other mic could be wired for this radio.
> Pin input is a 8 pin connecter, would any up and down button mic work.
> After searching the net I have learned that the mic for this rig has two
> buttons on it
> For searching the memory channels, up or down.
> Please help ..... Richard.
>

Richard -

First, do the obvious and contact Radio Shack.
They have a web site, an 800 number and technical support.

What you want to know is if the replacement microphone is still available,
its part number and cost.
Much of this is now "on-line at Radio Shack
http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1101&Name=Ham%20and%20Marine%20Radios&Reuse=N

190-1101 MOBIL TRANSCEIVER HTX-100 Faxback Doc. # 21286
To order parts call 1-800-843-7422 or visit your local RadioShack store.

MC501 10804706 MICROPHONE,COMPLETE MK389 MA0020
10804706 600 OHM,DYNAMIC MA0020

So there is your part number and phone number ... probably be less painful
and cheaper than adapting a microphone you would buy.

w9gb

2534. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 09:31:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgs7p0$d7i$1@hercules.btinternet.com>
Source record: 90255

"Richard Harrison" wrote -

> There is no propagation of horizontally polarized groundwaves at
> all. The low-angle reflected wave is out of phase with the incident
> wave.
>

With a groundwaves there is no reflected wave and incident wave to get out of phase with each other. By definition, it is all in the ground down to one skin depth.

Very simply, a horizontally polarised groundwave, with its horizontal current, suffers great attenuation in the loss resistance of the horizontal ground. It gets launched but after one or two wavelengths it is many decibels down.

This is the reason why horizontally polarised noise, relatively locally generated, is smaller than the vertically polarised variety although, on the average, both are randomly generated with equal amplitudes.

Half of the total noise power is dissipated in the ground except that which is generated immediately adjacent to your receiving antenna.

Reg, G4FGQ

2535. Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 12:13:21 UTC
From: bccubed@aol.com
Message-ID: <20040829081321.04675.00001690@mb-m21.aol.com>
Source record: 90256

Hello all,

I am new to SWL, ham radio and I have am wondering if I could recreate some of the high end antennas that I see in catalogs in copper tubing? I would imagine that copper can be quite a bit heavier than stainless steel or aluminum. Are there any differences in reception? Does anyone know a good resource to learn more?

Thanks,

Mickey

2536. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 12:19:37 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-C68CE1.07193729082004@newssvr22-ext.news.prodigy.com>
Source record: 90257

In article
<aa5vuNOSPAM-2A2F91.20303224082004@newssvr24-ext.news.prodigy.com>,
"Dick, AA5VU" <aa5vuNOSPAM@arrl.net> wrote:

> I am planning to put up an inverted-L along side my tower per the
> drawing at
>
> http://www.bloomington.in.us/~wh2t/invertedl.html
>
> I would appreciate some suggestions for 12 and 30 inches stand offs
> to support the 12g insulated wire I plan to use. Also the wire needs to
> be secured at the top before it bends over. Any suggestions to keep it
> from slipping at that point will be appreciated.
>
> I plan to ball part the length at 130 feet and see what happens.
>
> Dick, AA5VU
> call at ARRL.net

I just got back from Home Depot and the sell some treated (nasty
smelling) 2 x 2 deck post that are 3 feet long for $.99 each. I will be
using one at the top and one at the bottom to keep the antenna wire away
from the tower. I stripped the old stuff off the tower this week and
hope to have the 160 meter Inverted-L for RTTY up in a week or so. I am
getting too old for this tower climbing stuff. HiHi

Thanks for the excellent suggestions.

2537. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 12:32:37 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <M4udndh45YT8UazcRVn-pg@bright.net>
Source record: 90258

There probably isn't even a perceptible difference in reception between aluminum, copper or stainless. Copper is easy to work with at VHF and above because you are dealing with fairly short sections. A copper yagi for 20 Meters, for example, would be quite unwieldy. The nicest thing about copper is that it is easy to make feedline connections to it...solder works fine. With the other metals, you need to rely more on mechanical connections such as ring lugs, bolts and nuts, etc. What band of frequencies are you planning to build for?

The ARRL Antenna Book is a good place to start learning about antennas. You should be able to find it at http://www.arrl.org and order online there as well.

Another site is http://ac6v.com/swl.htm#ANT if you are looking for SWL antennas.

Scott

BCcubed wrote:
> Hello all,
>
> I am new to SWL, ham radio and I have am wondering if I could recreate some of
> the high end antennas that I see in catalogs in copper tubing? I would
> imagine that copper can be quite a bit heavier than stainless steel or
> aluminum. Are there any differences in reception? Does anyone know a good
> resource to learn more?
>
> Thanks,
>
> Mickey

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die

2538. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 12:36:19 UTC
From: k9sqg@aol.com
Message-ID: <20040829083619.18077.00002568@mb-m03.aol.com>
Source record: 90259

That treated lumber is not a long term solution by any means. To extend its life, ensure it is stained and sealed yearly or every other year.

2539. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 12:37:32 UTC
From: k9sqg@aol.com
Message-ID: <20040829083732.18077.00002569@mb-m03.aol.com>
Source record: 90260

Mickey,

Stainless steel is not as good a conductor as copper. It is used for mechanical reasons primarily.

Evan

2540. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 14:47:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4131edfb_1@corp.newsgroups.com>
Source record: 90261

Yuri Blanarovich wrote:
> "Becomes very lossy" or paraphrased "lose its conductivity" to make the point?

I agree that a wire laid on the ground does not become very lossy
although energy is lost to the lossy medium in proximity to the wire.
What is happening is decreasing ExH power caused by field attenuation
in the ground. In free space, the E-field causes an equal energy H-field
which causes an equal energy E-field, ad infinitum. In the presence of a
lossy medium, like earth, the fields undergo an attenuation factor so
that each field strength is less than the previous cycle. The decrease
of the voltage and the current on/in the wire on the ground is *caused*
by the attenuation of the surrounding fields and would occur even if
the wire were a super-conductor. The wire itself does not "become very
lossy". The ground around the wire becomes very lossy.

Consider the power transferred through a transformer. The primary
has highly conductive insulated wire but "loses" virtually all of
its power, not through conduction, but through induction, to the
secondary. The losses through an insulated wire laid on the ground
are through induction, not conduction.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2541. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 15:02:10 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <SdmYc.3473$JT3.1228@newsread3.news.atl.earthlink.net>
Source record: 90262

> I am new to SWL, ham radio and I have am wondering if I could recreate
some of
> the high end antennas that I see in catalogs in copper tubing? I would
> imagine that copper can be quite a bit heavier than stainless steel or
> aluminum. Are there any differences in reception? Does anyone know a
good
> resource to learn more?
>

Copper is the best except for silver. The problems with either is the cost
and mechanical strength. Wind will usually bend copper tubing and it will
not spring back like the antenna grade aluminum.
There is a very slight (probably not even enough to notice) differance for
the beter with copper over SS or aluminum.
If you can keep the wind dammagd down , then go with the copper tubing.

2542. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 15:25:29 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4131F5B7.5EF570B1@shaw.ca>
Source record: 90263

BCcubed wrote:
>
> Hello all,
>
> I am new to SWL, ham radio and I have am wondering if I could recreate some of
> the high end antennas that I see in catalogs in copper tubing? I would
> imagine that copper can be quite a bit heavier than stainless steel or
> aluminum. Are there any differences in reception? Does anyone know a good
> resource to learn more?
>
> Thanks,
>
> Mickey

Weight considerations aside, if you are building a copper antenna with
soldered fittings, use silver solder. The normal resin-core solder will
not stand up to vibration from wind and other things.

Irv
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2543. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 16:28:31 UTC
From: raiar@bbs.galilei.com.nospam
Message-ID: <4131ff44.875373093@news.galilei.com>
Source record: 90264

Hi Mickey

Copper is GREAT for Antenna's!
It's only slightly heavier than Aluminum.
But their are MAJOR advantages to using copper.
Solid corrosion free joints is only one of them.

There are three (without getting technical) basic copper tubing types
available. Soft Copper (easily bendable), Hard Copper (water pipes,
which can be swedged under heat), and Annealed Copper (refrigeration
tubing).
Regular Hard Copper water tubing is sufficient for most antenna work.
But if your building something like a long Yagi, you definately will
want to use Anneled Copper for the boom or you will wake up with
U-shaped Yagi one morning.
You can also often work in smaller pipe sizes when using the Annealed
Copper as well. Such as 1/2 inch Annealed instead of 3/4 inch Hard.
Even the soft copper comes in handy for some non-supporting components
such as coils and the like.

When joining copper using fittings or swedged joints use either
standard plumbing methods or preferrably silver solder in these
joints. When building things like Yagi's where you may be passing the
elements through the boom without using fittings, copper phosphorus
bronze brazing rods work at propane torch temperatures and make a more
secure joint than silver solder on these types of connections.

Where electrical connections need to be made (and often may need
changing or maintenance) I found that adding a soft copper tube or
heavy copper wire, affixing it to the antenna with copper phosphorus
bronze, allows a good soldering gun and rosin core solder to make the
electrical connection to the pigtail installed for this purpose.

TTUL - 73+ de Gary - KG ZP

2544. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 17:58:06 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <5664j0dcmi9mntuburjjbbobg1rf16arur@4ax.com>
Source record: 90265

On Sun, 29 Aug 2004 03:43:22 GMT, "G.Beat"
<now9spamgb@no.comcast.spam.net> wrote:

>First, do the obvious and contact Radio Shack.
>They have a web site, an 800 number and technical support.
>
>What you want to know is if the replacement microphone is still available,
>its part number and cost.
>Much of this is now "on-line at Radio Shack
>http://support.radioshack.com/productinfo/DocumentResults.asp?sku_id=19-1101&Name=Ham%20a
nd%20Marine%20Radios&Reuse=N
>
>190-1101 MOBIL TRANSCEIVER HTX-100 Faxback Doc. # 21286
>To order parts call 1-800-843-7422 or visit your local RadioShack store.
>
>MC501 10804706 MICROPHONE,COMPLETE MK389 MA0020
> 10804706 600 OHM,DYNAMIC MA0020
>
>So there is your part number and phone number ... probably be less painful
>and cheaper than adapting a microphone you would buy.
>
With RS, getting tech support, replacement parts, etc you will
probably do better with their website or 800 number than with many of
their local stores.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2545. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 18:02:15 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncj46h7.5a5.bit-bucket@shell.config.com>
Source record: 90266

On Sun, 29 Aug 2004 12:19:37 GMT, Dick, AA5VU hath writ:
>
> I just got back from Home Depot and the sell some treated (nasty
> smelling) 2 x 2 deck post that are 3 feet long for $.99 each. I will be
> using one at the top and one at the bottom to keep the antenna wire away
> from the tower. I stripped the old stuff off the tower this week and
> hope to have the 160 meter Inverted-L for RTTY up in a week or so. I am
> getting too old for this tower climbing stuff. HiHi

I certainly hope you can personally select the posts you buy.
You, of course, don't wany any with knots in them!
And, _that_ may be why they are $.99 each. HI!HI!

In a similar thread, I suggested the use of fiberglass replacement
tool handles. Something like a grass rake handle should Fit The Bill.

That's what I use for a stand-off (stand-away?) for the mid-point of my
75M/40M Inverted Vee's. I painted it "Rohn Grey" before installing it.

I was Very Lucky: When I went to the local ACE H/W Store, they _gave_
me a cut-off for free. Seems they got a shipment of Very Defective
shovels, and headquarters told them not to send them back -- but,
rather, to cut the handles off the shovels (which were the defective
component -- they split [!!] down the center under heavy, but reasonable
use) and to toss'em in the dumpster. Well, the folks at the ACE here
are about as commited a set of scroungers as I am. They threw out
the shovels and stored the handles in a large barrel in the back lot.

73 es gl
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2546. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 18:04:46 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncj46lu.5a5.bit-bucket@shell.config.com>
Source record: 90267

On Sun, 29 Aug 2004 15:02:10 GMT, Ralph Mowery hath writ:
>> I am new to SWL, ham radio and I have am wondering if I could recreate
> some of
>> the high end antennas that I see in catalogs in copper tubing? I would
>> imagine that copper can be quite a bit heavier than stainless steel or
>> aluminum. Are there any differences in reception? Does anyone know a
>> good resource to learn more?
>
> Copper is the best except for silver.

Well, there's gold. HI!HI!

> The problems with either is the cost and mechanical strength.

Same problems -- only worse.

73
Jonesy

2547. Re: Feedline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 18:09:51 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrncj46vf.5a5.bit-bucket@shell.config.com>
Source record: 90268
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.antenna

[Insidious Top Posting corrected]

On Sat, 28 Aug 2004 15:37:32 GMT, p.paulfriedman hath writ:
>
> "Cecil Moore" <w5dxp@hotmail.com> wrote in message
> news:4130a4f5_8@corp.newsgroups.com...
>> Doug Birky wrote:
>>> My feedline will be abou 200'. Can I run RG-8 this far?
>>
>> What frequency and what SWR? About 50% of your power would
>> be lost on 10m with a matched antenna.
>> --
>> 73, Cecil http://www.qsl.net/w5dxp
>>
> 50? that is close to the lose for 8X. For 8/U the loss would be closer to
> 40% (assuming, as you did, a 1:1 VSWR).
>
> Paul AB0SI

Yep.
I would sleep better at night knowing that I was
losing 40% of my power versus an unacceptable 50%. HI!HI!

Jonesy W3DHJ
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

2548. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 19:17:04 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <5ea4j0ppgermugnmqjl5mfvnkq3rgdib3c@4ax.com>
Source record: 90269

On Sun, 29 Aug 2004 09:31:13 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>"Richard Harrison" wrote -
>
>> There is no propagation of horizontally polarized groundwaves at
>> all. The low-angle reflected wave is out of phase with the incident
>> wave.
>>
>--
>
>With a groundwaves there is no reflected wave and incident wave to get out
>of phase with each other. By definition, it is all in the ground down to
>one skin depth.

Reg, you are correct, of course, but Richard H. said above, "There is no propagation of horizontally polarized groundwaves at all. The low-angle reflected wave is out of phase with the incident wave."

What Richard mean't concerning the 'reflected' wave is that the energy radiated downward from a horizontal antenna is reflected by the ground, and that reflected wave is out of phase with the incident wave.

Walt, W2DU

2549. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 19:31:11 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <s4b4j0t9ejmhfvv5uouqepfv61ocqpucer@4ax.com>
Source record: 90270

On Sat, 28 Aug 2004 21:32:57 -0500, richardharrison@webtv.net (Richard Harrison) wrote:
> snip
>Unbalanced vertical antennas are convenient for groundwaves to extend
>beyond the horizon for the mediumwave broadcaster. These antennas are
>conveniently fed by coax of the concentric pipe or skeletal types. All
>groundwaves are vertically polarized. These can travel very far at low
>and medium frequencies. Attenuation of high frequency groundwaves is
>severe. There is no propagation of horizontally polarized groundwaves at
>all. The low-angle reflected wave is out of phase with the incident
>wave.
>
>Bottom line is that shortwave broadcasters transmit from horizontal
>antennas and mediumwave broadcasters transmit from vertical antennas.
>For shortwave, the target is reached via the ionosphere. For mediumwave,
>the target is reached via the earth`s surface which is involved in
>reaching beyond the line of sight.

Richard, when I was doing AM BC consulting more than 50 years ago I made the observation from FCC ground-wave distance vs frequency propagation charts that with the same ground conductivity and 1/4 wl antennas for both frequencies, the 1mv/m contour attained by 100 w at 540 kHz would require slightly less than 50 Kw at 1500 kHz,

Proves your point, doesn't it?

Walt, W2DU

2550. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 19:56:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41323672$1_2@corp.newsgroups.com>
Source record: 90171

Cecil Moore wrote:
> Yuri Blanarovich wrote:
>> "Becomes very lossy" or paraphrased "lose its conductivity" to make
>> the point?
>
> I agree that a wire laid on the ground does not become very lossy
> although energy is lost to the lossy medium in proximity to the wire.

When I worked for the Schlumberger Oil Well Surveying Corp., I
used to run an "induction log" on freshly drilled wells before
the casing was set while the hole was filled with "mud". In basic
terms, it worked like a transformer. The primary would create an
inductive field in a donut shape out in the formation. That inductive
field would generate a voltage in the secondary of the transformer.
A little processing of the received signal yielded the conductivity
of the formation, high for shale and salt water, low for fresh water
and oil, lower for gas - same principle as metal detectors.

We also had a cheaper "electrical log" which was simply two conductive
electrodes at each end of a wire-line sonde between which conduction
current was measured. Not nearly as accurate as the induction log
because it was highly affected by the fresh water used to make the mud.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2551. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 20:55:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j4gm8gr67rbe0@corp.supernews.com>
Source record: 90172

Although a reflected horizontally polarized wave is out of phase with
the incident wave, and this explains the zero far field strength you get
with horizontally polarized waves, I'm not sure this is the relevant
explanation for the lack of ground wave propagation. The reason I doubt
it is that if you do the same analysis for vertically polarized waves,
you find that the net field strength is also zero at zero elevation
angle, except for the special case where ground is perfectly conducting.
So using the same analysis, you'd have to conclude that vertically
polarized waves can't propagate by ground wave, either.

Roy Lewallen, W7EL

Walter Maxwell wrote:
> On Sun, 29 Aug 2004 09:31:13 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>
>>"Richard Harrison" wrote -
>>
>>
>>>There is no propagation of horizontally polarized groundwaves at
>>>all. The low-angle reflected wave is out of phase with the incident
>>>wave.
>>>
>>
>>--
>>
>>With a groundwaves there is no reflected wave and incident wave to get out
>>of phase with each other. By definition, it is all in the ground down to
>>one skin depth.
>
>
> Reg, you are correct, of course, but Richard H. said above, "There is no
> propagation of horizontally polarized groundwaves at all. The low-angle
> reflected wave is out of phase with the incident wave."
>
> What Richard mean't concerning the 'reflected' wave is that the energy radiated
> downward from a horizontal antenna is reflected by the ground, and that
> reflected wave is out of phase with the incident wave.
>
> Walt, W2DU
>
>
>

2552. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-29 23:51:52 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net>
Source record: 90173

I have an extra and would be glad to send it to you, free of charge,
Richard. It's brand new too, just say the word.

The rig was given to me as a gift and the generous giver had no way of
knowing that he was giving a phone-only rig to a CW addict. ;-)

--
73 de Bert
WA2SI
"Richard" <reve6gte@telus.net> wrote in message
news:YD9Yc.54028$S55.37744@clgrps12...
> I have a Radio Shack model HTX-100 Ten meter transceiver, brand new and
have
> never been used, still in the box. The problem is that I do not have a
> microphne for
> it and would like to know what other mic could be wired for this radio.
> Pin input is a 8 pin connecter, would any up and down button mic work.
> After searching the net I have learned that the mic for this rig has two
> buttons on it
> For searching the memory channels, up or down.
> Please help ..... Richard.
>
>

2553. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 01:56:53 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <FPvYc.53965$jZ5.27292@clgrps13>
Source record: 90174

Thanks Bert for the great offer how can one refuse an offer like that.
For some reason I can not send you an email direct , it just won't send when
replying to sender, please send me an email and we can take it from there.
Tnx agn fer the Offer. Will check News Group also..
.......Richard.........

"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> I have an extra and would be glad to send it to you, free of charge,
> Richard. It's brand new too, just say the word.
>
> The rig was given to me as a gift and the generous giver had no way of
> knowing that he was giving a phone-only rig to a CW addict. ;-)
>
> --
> 73 de Bert
> WA2SI
> "Richard" <reve6gte@telus.net> wrote in message
> news:YD9Yc.54028$S55.37744@clgrps12...
> > I have a Radio Shack model HTX-100 Ten meter transceiver, brand new and
> have
> > never been used, still in the box. The problem is that I do not have a
> > microphne for
> > it and would like to know what other mic could be wired for this radio.
> > Pin input is a 8 pin connecter, would any up and down button mic work.
> > After searching the net I have learned that the mic for this rig has two
> > buttons on it
> > For searching the memory channels, up or down.
> > Please help ..... Richard.
> >
> >
>
>

2554. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 02:18:06 UTC
From: richardharrison@webtv.net
Message-ID: <11917-41328E5E-142@storefull-3254.bay.webtv.net>
Source record: 90176

Roy, W7EL wrote:
"So using the same analysis, you`d have to conclude that vertically polarized waves can`t propagate by ground wave either."

I`ll turn to the authors for a source of my contention.

Terman says in his 1955 edition on page 803:
"The ground wave is vertically polarized, because any horizontal component of electric field in contact with the earth is short-circuited by the earth."

And on page 808, Terman says:
"Examination of these vector diagrams shows that with a perfect reflector the horizontal components of electric field will exactly cancel each other at the surface of the perfect conductor. In contrast, the vertical components of the electric field of the incident and reflected waves do not cancel, but rather add at the reflector surface with small values of earth reflection angle."

Best regards, Richard Harrison, KB5WZI

2555. Re: antenna formula needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 02:24:09 UTC
From: kelly@dvol.com
Message-ID: <d22b54c3.0408291824.49071a0c@posting.google.com>
Source record: 90175

"mike beauchamp" <mbeauchamp@cogeco.ca> wrote in message
news:<VI9Yc.12796$0c.8521@read1.cgocable.net>...
> Can anyone tell me what the proper formula for finding a odd multiple of a
> wave legnth in inches would be?IM trying to build a four element vhf
> vertical array.
> does anyone out there have a link to some dos software or java that would
> let me imput the frequency id like to find the odd quarter wavelength for,
> and it would give me a list of the diffrent multiples of the wavelegnth. or
> just a simple list of antenna formulas for finding the legnth in inches..
> thanks mbeauchamp@cogeco.ca

. . I'm finally willing to give up my Post Sun-Hemi bamboo slipstick
which would help you out of your quagmire . . make me an offer I can't
refuse . .

w3rv

2556. Re: antenna formula needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 02:53:12 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41329698$0$74186$39cecf19@news.twtelecom.net>
Source record: 90177

60 USD.

tom
K0TAR

Brian Kelly wrote:

> "mike beauchamp" <mbeauchamp@cogeco.ca> wrote in message
news:<VI9Yc.12796$0c.8521@read1.cgocable.net>...
>
>>Can anyone tell me what the proper formula for finding a odd multiple of a
>>wave legnth in inches would be?IM trying to build a four element vhf
>>vertical array.
>>does anyone out there have a link to some dos software or java that would
>>let me imput the frequency id like to find the odd quarter wavelength for,
>>and it would give me a list of the diffrent multiples of the wavelegnth. or
>>just a simple list of antenna formulas for finding the legnth in inches..
>>thanks mbeauchamp@cogeco.ca
>
>
> . . I'm finally willing to give up my Post Sun-Hemi bamboo slipstick
> which would help you out of your quagmire . . make me an offer I can't
> refuse . .
>
> w3rv

2557. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 04:09:39 UTC
From: richardharrison@webtv.net
Message-ID: <5890-4132A883-15@storefull-3255.bay.webtv.net>
Source record: 90178

Roy, W7EL wrote:
"So using the same analysis, you`d have to conclude that vertically polarized waves can`t propagate by ground waves either."

Earth isn`t perfectly conductive but even so permits propagation of vertically polarized waves.

Another expert, Kraus says on page 412 of his 1950 edition of "Antennas":
"The electric field of a wave traveling along a perfectly conducting surface is perpendicular to the surface....However, if the surface is an imperfect conductor, such as the earth`s surface or ground, the electric-field lines have a forward tilt near the surface.... Hence, the field at the surface has a vertical component Ey and a horizontal component Ex. The component Ex is associated with that part of the wave that enters the surface and is dissipated in heat. The Ey component continues to travel along the surface.

Best regards, Richard Harrison, KB5WZI

2558. Re: antenna formula needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 04:50:57 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <bI6dnU7HroWkL6_cRVn-jA@adelphia.com>
Source record: 90179

"mike beauchamp" <mbeauchamp@cogeco.ca> wrote in message
news:VI9Yc.12796$0c.8521@read1.cgocable.net...
> Can anyone tell me what the proper formula for finding a odd multiple of
a
> wave legnth in inches would be?IM trying to build a four element vhf
> vertical array.
> does anyone out there have a link to some dos software or java that would
> let me imput the frequency id like to find the odd quarter wavelength for,
> and it would give me a list of the diffrent multiples of the wavelegnth.
or
> just a simple list of antenna formulas for finding the legnth in inches..
> thanks mbeauchamp@cogeco.ca
>

check this one out http://www.packetradio.com/ant.htm#vhfcut

or just do a search for "VHF antenna formulas"

2559. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 05:04:57 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <0K6dnZeQ2eAfKK_cRVn-gg@adelphia.com>
Source record: 90180

"Walter Maxwell" <w2du@iag.net> wrote in message
news:2g6si0519vch9jeeq0mu436t96i27d2vb8@4ax.com...
> On Thu, 26 Aug 2004 15:28:36 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:
>
> >On Thu, 26 Aug 2004 13:16:07 GMT, Darrell Gordon W4CX
> ><w4cx.nospam@arrl.net> wrote:
> >
> >>What are you guys using for HF measurements?
> >
> >Hi Darrell,
> >
> >General Radio 1606-A: 400KHz - 60MHz, Resistance 0 - 1000 Ohms ±1%,
> >Reactance 0 - 5000/F Ohms ±2%.
> >
> >73's
> >Richard Clark, KB7QHC
>
> Hi Darrell,
>
> I was just about to tell you what I use, but Richard, above, beat me to
it. For
> HF measurements this bridge, the General Radio 1606-A, is the Cadillac of
all
> bridges. It 's been the bridge of choice for nearly every AM broadcast
engineer
> in determining t he impedance of AM broadcast antennas since it came on
the
> market in 1955.

i have yet to see one at a US broadcast station. the meter that is usually
found, and used is the delta OIB-1 or OIB-3
http://www.deltaelectronics.com/data/oib1&3.htm

It's very nearly the same as it's predecessor, the GR 916-A,
> which came out in the 1940's. It's what the AM antenna engineers used
prior to
> the 1606.
>
> You can find the 1606-A on eBay, and the price ranges from $200 to $1000.
> However, you also need a signal generator to feed it the signal it needs
to
> operate, plus your receiver as the signal detector.
>

> I also use more modern impedance measuring devices, such as
Hewlett-Packard's
> HP-4815 Vector Impedance Meter, and their HP 8405 Vector Voltmeter. These
two
> instruments are also laboratory grade quality. All of these instruments
far
> exceed the accuracy of the devices you listed.
>
> Hope this helps,
>
> Walt, W2DU

2560. Re: Beverage Antenna Used in WW2

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 05:23:34 UTC
From: richardharrison@webtv.net
Message-ID: <5888-4132B9D6-166@storefull-3255.bay.webtv.net>
Source record: 90182

Walter Maxwell, W2DU wrote:
"The Beverage was more than one-half mile long at a height of 10 feet, aimed directly at Tokyo, and terminated with a variable resistor."

2 wavelengths at 650 KHz is a little more than 1/2 mile and is likely the point of diminishing returns in lengthening a Beverage according to some reports.

I used a Beverage in Portugal to listen to the CBS Nightly News from WCBS in New York or from WWL in New Orleans, whichever was better at the time. Both carried the same program and were adjacent points on the frequency dial. It worked like a charm using a SP-600.

RFE constantly monitored news and commentary broadcasts from behind the "iron curtain" during the "cold war" from a receiving station in Germany. A multitower directional array and various super loopsticks were used to pick out the broadcasts monitored. These were more flexible than Beverages and many possible sources were available for programs to be monitored.

Best regards, Richard Harrison, KB5WZI

2561. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 05:32:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j5f04gu8c3o26@corp.supernews.com>
Source record: 90181

That's a much better explanation of the phenomenon of ground wave
analysis than the first one you put forth.

Roy Lewallen

Richard Harrison wrote:
> Roy, W7EL wrote:
> "So using the same analysis, you`d have to conclude that vertically
> polarized waves can`t propagate by ground waves either."
>
> Earth isn`t perfectly conductive but even so permits propagation of
> vertically polarized waves.
>
> Another expert, Kraus says on page 412 of his 1950 edition of
> "Antennas":
> "The electric field of a wave traveling along a perfectly conducting
> surface is perpendicular to the surface....However, if the surface is an
> imperfect conductor, such as the earth`s surface or ground, the
> electric-field lines have a forward tilt near the surface.... Hence, the
> field at the surface has a vertical component Ey and a horizontal
> component Ex. The component Ex is associated with that part of the wave
> that enters the surface and is dissipated in heat. The Ey component
> continues to travel along the surface.
>
> Best regards, Richard Harrison, KB5WZI
>

2562. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 06:28:06 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <f3d5j0d10692j7h8gp2q73eap0o9blok2a@4ax.com>
Source record: 90183

On 29 Aug 2004 12:28:31 EDT, raiar@bbs.galilei.com.nospam (Gary V. Deutschmann, Sr.) wrote:

>Copper is GREAT for Antenna's!
>It's only slightly heavier than Aluminum.
>But their are MAJOR advantages to using copper.
>Solid corrosion free joints is only one of them.

Due to the skin effect, RF currents only flow on the surface of the conductor. At VHF frequencies, the skin depth in copper is only about 5 um, in which nearly all RF currents flow, thus the low resistivity of this thin surface layer is critical. From RF point of view, it does not matter much what is below this surface, so it might be empty (a tube) or it might be something with lower conductivity, such as stainless steel (with much greater mechanical strength).

However, if the antenna is not protected by a radome, the weather will within a few years affect the copper surface, creating oxides and the copper becomes green or dark brown. Now the question is, what is the conductivity of these surface layers. If these layers are isolators, the RF current will flow in the clean copper below, but if the layers have some mediocre conductivity, part of the RF current will flow in these oxide layers, increasing the total resistance.

This should not be areal problem with VHF antennas made of tubes, since the length to surface ratio is quite small.

Paul OH3LWR

2563. Re: antenna formula needed

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 06:28:52 UTC
From: richardharrison@webtv.net
Message-ID: <5889-4132C924-62@storefull-3255.bay.webtv.net>
Source record: 90184

Mike Beauchamp wrote:
"Can anyone tell me what the proper formula for finding a odd multiple in inches would be?"

Wavelength in meters is 300 divided by frequency in MHz. A meter is 39.37 inches. Reduce the antenna length by about 5% for "end effect". A balanced antenna is often 1/2-wavelength. An unbalanced antenna is often 1/4-wavelength. Antennas are usually nnear self-resonant lengths to avoid reactive opposition to antenna current.

Search on VHF antenna lengths. For an odd frequency multiple, divide the fundamental frequency length by the order of the multiple. For 3X the frequency, the length will be approximately 1/3 the fundamental length.

Always cut the calculated lengths a little long. It`s easier to trim to length than to augment a too short antenna in most cases.

Best regards, Richard Harrison, KB5WZI

2564. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 06:42:23 UTC
From: richardharrison@webtv.net
Message-ID: <5888-4132CC4F-174@storefull-3255.bay.webtv.net>
Source record: 90185

Roy, W7EL wrote:
"That`s a much better explanation of the phenomenon of ground wave
analysis than the first one you put forth."

True! Kraus was a much better explainer than I will ever be, I fear.

Best regards, Richard Harrison, KB5WZI

2565. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 09:34:02 UTC
From: eas90168@aol.com
Message-ID: <4b031b96.0408300134.1095be8a@posting.google.com>
Source record: 90186

I think the mike connection pin out for your HTX-100 and the Kenwood
HF transceivers are the same. Look in your owner's manual and then
the mike connector at Kenwood's web sight. See if they are the same.
If so, and you cant find a RS replacement, get a Kenwood microphone.

Eric N7DLV

"Richard" <reve6gte@telus.net> wrote in message news:<FPvYc.53965$jZ5.27292@clgrps13>...
> Thanks Bert for the great offer how can one refuse an offer like that.
> For some reason I can not send you an email direct , it just won't send when
> replying to sender, please send me an email and we can take it from there.
> Tnx agn fer the Offer. Will check News Group also..
> ....Richard.........
>
>
> "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> > I have an extra and would be glad to send it to you, free of charge,
> > Richard. It's brand new too, just say the word.
> >
> > The rig was given to me as a gift and the generous giver had no way of
> > knowing that he was giving a phone-only rig to a CW addict. ;-)
> >
> > --
> > 73 de Bert
> > WA2SI
> > "Richard" <reve6gte@telus.net> wrote in message
> > news:YD9Yc.54028$S55.37744@clgrps12...
> > > I have a Radio Shack model HTX-100 Ten meter transceiver, brand new and
> have
> > > never been used, still in the box. The problem is that I do not have a
> > > microphne for
> > > it and would like to know what other mic could be wired for this radio.
> > > Pin input is a 8 pin connecter, would any up and down button mic work.
> > > After searching the net I have learned that the mic for this rig has two
> > > buttons on it
> > > For searching the memory channels, up or down.
> > > Please help ..... Richard.
> > >
> > >
> >
> >

2566. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 10:33:07 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <n506j05jpnkff2igisnkeh8qvfrj6qpdhc@4ax.com>
Source record: 90187

On Mon, 30 Aug 2004 09:28:06 +0300, Paul Keinanen <keinanen@sci.fi>
wrote:

>Due to the skin effect, RF currents only flow on the surface of the
>conductor. At VHF frequencies, the skin depth in copper is only about
>5 um, in which nearly all RF currents flow, thus the low resistivity
>of this thin surface layer is critical. From RF point of view, it does
>not matter much what is below this surface, so it might be empty (a
>tube) or it might be something with lower conductivity, such as
>stainless steel (with much greater mechanical strength).
>
Another plus of this is used in some high-powered industrial equipment
that uses RF, and I believe some broadcast equipment. For cooling,
copper tubing is used as the RF conductor (skin effect only) and water
is pumped through the inside. A few tricks of the trade, like using
pure water without dissolved ions, and connecting the plumbing with
non-metal parts to isolate the RF, are involved.

Sometimes the copper is plated with silver, not so much for better
conductivity as the better oxidation properties of exposed silver.
Gold would be a bit better, even if a lot tougher on the budget.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2567. The exciting world of APRS

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 12:13:38 UTC
From: hxc98@yahoo.com
Message-ID: <aa8577c5.0408300413.52f3cdf@posting.google.com>
Source record: 90188

Start learning about the exciting world of APRS with APRSPoint, the APRS software regarded by most hams as having the best map support and most intuitive user interface. Track other hams on a zoomable, street-level detail map in an intuitive and easy to use interface. Send instant short messages through either RF or internet link. If you are an experienced APRS user, you'll appreciate the ability to plot a digipeater or other ham stations' signal range on the map, connect to APRS internet servers, send email through your ham radio, and other advanced features. This week you can get APRSPoint with MapPoint 2004 included for the best possible price ever. Check out the website at http://www.aprspoint.com/ for details.

2568. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 13:42:27 UTC
From: richardharrison@webtv.net
Message-ID: <21505-41332EC3-144@storefull-3256.bay.webtv.net>
Source record: 90189

Gary Schwartz wrote:
"For cooling, copper tubing is used as the RF conductor (skin effect only) and water is pumped through the inside."

That`s exactly the structure of the final amplifier tank coil of the 100KW GE watercooled shortwave transmitters used at RFE. The coil was silver plated. We distilled our own cooling water and the water circulation system was connected by Saran tubing. Though many KV were applied to the plates, d-c leakage was insignificant.

Best regards, Richard Harrison, KB5WZI

2569. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 14:10:19 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <91d6j01ag41ps16k7ur1d7i8i5pdrsttjm@4ax.com>
Source record: 90190

On Mon, 30 Aug 2004 08:42:27 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Gary Schwartz wrote:
>"For cooling, copper tubing is used as the RF conductor (skin effect
>only) and water is pumped through the inside."
>
>That`s exactly the structure of the final amplifier tank coil of the
>100KW GE watercooled shortwave transmitters used at RFE. The coil was
>silver plated. We distilled our own cooling water and the water
>circulation system was connected by Saran tubing. Though many KV were
>applied to the plates, d-c leakage was insignificant.
>
>Best regards, Richard Harrison, KB5WZI

Almost like I have seen high powered RF coils like this. ;-)

I've seen them, used them, and fixed them. I think the biggest system I worked on was a mere 25 or 30 kV. Not broadcast, but plasma generating process equipment.

Only so many reasoanble ways to solve this problem.

Your water cooling does need to be able to handle the heat generated by significant mismatches, not just ideal operation. It is bad luck to melt parts of your cooling system.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

2570. Re: Signal Strength Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 14:24:47 UTC
From: richardharrison@webtv.net
Message-ID: <11918-413338AF-66@storefull-3254.bay.webtv.net>
Source record: 90191

Drink wrote:
"Don`t know how many floors up to your roof but, at 43 plus floors, you`d get awesome reception I suspect if you just put a real antenna on the roof and ran the line down to your office."

It`s worth a try but may not result in a clear picture. I`ve fought that battle from the roof of the almost highest building in town. You are probably at about 650 feet and the TV horizon if visible would be about 36 miles away. Line of sight may have little to do with your problem. Other structures in a city reflect delayed signals in your direction, blurring your reception.

You need high directivity to "turn a blind eye" to the multiple reflections.

Best regards, Richard Harrison, KB5WZI

2571. Re: Tower stand offs for 160 Meter Inv-L

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 15:01:59 UTC
From: "Dick, AA5VU" <aa5vuNOSPAM@arrl.net>
Message-ID: <aa5vuNOSPAM-8D4BB3.10015930082004@newssvr24-ext.news.prodigy.com>
Source record: 90192

In article <slrncj46h7.5a5.bit-bucket@shell.config.com>,
Allodoxaphobia <bit-bucket@config.com> wrote:

> n a similar thread, I suggested the use of fiberglass replacement
> tool handles. Something like a grass rake handle should Fit The Bill.

I went to Home Depot and they did not have what you described. The had
some crappy extension poles. The wood I picked is pretty good and should
work out okay.

2572. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 15:26:24 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <r9h6j0hirhu71knlubbia1aak9k4ujm70r@4ax.com>
Source record: 90193

On Mon, 30 Aug 2004 01:04:57 -0400, "Tim Perry" <timperryspammenot@adelphia.net>
wrote:

>
>"Walter Maxwell" <w2du@iag.net> wrote in message
>news:2g6si0519vch9jeeq0mu436t96i27d2vb8@4ax.com...

>snip

>> I was just about to tell you what I use, but Richard, above, beat me to
>it. For
>> HF measurements this bridge, the General Radio 1606-A, is the Cadillac of
>all
>> bridges. It 's been the bridge of choice for nearly every AM broadcast
>engineer
>> in determining t he impedance of AM broadcast antennas since it came on
>the
>> market in 1955.
>
>i have yet to see one at a US broadcast station. the meter that is usually
>found, and used is the delta OIB-1 or OIB-3
>http://www.deltaelectronics.com/data/oib1&3.htm
>
Hi Tim,

I can't disagree with you here, because my knowledge is from several years back.
I'm not familiar the Delta except by reputation--all I've heard is that it's a
good instrument. The demise of General Radio is probably one reason the GR
instrument is no longer the instrument of choice, so the dividing line between
use of the GR and the Delta probably defines the end of one era and the
beginning of another.

Walt, W2DU

2573. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 15:36:57 UTC
From: richardharrison@webtv.net
Message-ID: <5888-41334999-236@storefull-3255.bay.webtv.net>
Source record: 90194

Roy, W7EL wrote:
"Notice that I said that the wire was most likely to be a problem with antennas on the order of an 80 meter dipole length."

80 meters isn`t the lowest nor the highest frequency ham band, but could be a problem for various reasons. Loss is directly proportional to resistance in the familiar current squared times resistance formula.

Resistance increases due to skin effect only as the square root of the frequency while resistance varies directly with the conductor length which varies inversely with frequency.

Loss gets worse for a given wire size as frequency drops because you need longer wire for a 1/4 wavelength. It doesn`t get worse as fast as it would if there were no skin effect because as frequency lowers, current penetration grows and wire resistance drops due to reduction of the skin effect. But, the longer wire is inevitable along with its higher resistance at the lower frequency.

At RFE, as soon as a new frequency became available we would often erect a Signal Corps rhombic kit and start broadcasting. These weren`t made for 100KW so the dissipation lines soon melted and the rhombics became bidirectional.

At the end of WW-2, many Central Europeans fled to South America. When we strengthened and replaced our dissipation lines, we discovered we had built a large loyal audience among the fugitives. Not too surprising since we were programming with some of their favorite entertainers who were also exiles. Too bad we had to eliminate the signal flooding South America, but other broadcasters had claims on the frequencies we were using for a South American audience.

Best regards, Richard Harrison, KB5WZI

2574. Re: Signal Strength Suggestions

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 15:53:27 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <Oo2dnaWcLtb40K7cRVn-sQ@comcast.com>
Source record: 90195

> You need high directivity to "turn a blind eye" to the multiple
> reflections.
>
> Best regards, Richard Harrison, KB5WZI

Indeed. I used to do MATV systems in Honolulu.
There, the TV transmitters are right in the middle of town.
One is about a block from a 25 story building, and of course a bunch of
others, and you're trying to get a good signal in the concrete jungle of
Waikiki..

We used "deep fringe" yagis, and large attenuators (20-30dB) then amplifiers
to drive the feeders.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

2575. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 16:23:30 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <6uk6j0t20cdoilohe6s3iqj01qq16j6khq@4ax.com>
Source record: 90196

On Mon, 30 Aug 2004 10:36:57 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Roy, W7EL wrote:
>"Notice that I said that the wire was most likely to be a problem with
>antennas on the order of an 80 meter dipole length."
>
>80 meters isn`t the lowest nor the highest frequency ham band, but could
>be a problem for various reasons. Loss is directly proportional to
>resistance in the familiar current squared times resistance formula.
>
>Resistance increases due to skin effect only as the square root of the
>frequency while resistance varies directly with the conductor length
>which varies inversely with frequency.
>
>Loss gets worse for a given wire size as frequency drops because you
>need longer wire for a 1/4 wavelength. It doesn`t get worse as fast as
>it would if there were no skin effect because as frequency lowers,
>current penetration grows and wire resistance drops due to reduction of
>the skin effect. But, the longer wire is inevitable along with its
>higher resistance at the lower frequency.
>
>At RFE, as soon as a new frequency became available we would often erect
>a Signal Corps rhombic kit and start broadcasting. These weren`t made
>for 100KW so the dissipation lines soon melted and the rhombics became
>bidirectional.
>
>At the end of WW-2, many Central Europeans fled to South America. When
>we strengthened and replaced our dissipation lines, we discovered we had
>built a large loyal audience among the fugitives. Not too surprising
>since we were programming with some of their favorite entertainers who
>were also exiles. Too bad we had to eliminate the signal flooding South
>America, but other broadcasters had claims on the frequencies we were
>using for a South American audience.
>
>Best regards, Richard Harrison, KB5WZI

Very interesting, Richard. Were the rhombic dissipation lines made of high resistance wire? And where were the transmitters located that flooded SA? And what SA countries did the fugitives concentrate in?

Walt

2576. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 16:36:01 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <RHIYc.56050$S55.43791@clgrps12>
Source record: 90197

Thank you all who replied to my post, greatly appreciated .

Richard

"Eric Snyder" <eas90168@aol.com> wrote in message
news:4b031b96.0408300134.1095be8a@posting.google.com...
> I think the mike connection pin out for your HTX-100 and the Kenwood
> HF transceivers are the same. Look in your owner's manual and then
> the mike connector at Kenwood's web sight. See if they are the same.
> If so, and you cant find a RS replacement, get a Kenwood microphone.
>
> Eric N7DLV
>
>
> "Richard" <reve6gte@telus.net> wrote in message
news:<FPvYc.53965$jZ5.27292@clgrps13>...
> > Thanks Bert for the great offer how can one refuse an offer like that.
> > For some reason I can not send you an email direct , it just won't send
when
> > replying to sender, please send me an email and we can take it from
there.
> > Tnx agn fer the Offer. Will check News Group also..
> > ....Richard.........
> >
> >
> > "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> > news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> > > I have an extra and would be glad to send it to you, free of charge,
> > > Richard. It's brand new too, just say the word.
> > >
> > > The rig was given to me as a gift and the generous giver had no way of
> > > knowing that he was giving a phone-only rig to a CW addict. ;-)
> > >
> > > --
> > > 73 de Bert
> > > WA2SI
> > > "Richard" <reve6gte@telus.net> wrote in message
> > > news:YD9Yc.54028$S55.37744@clgrps12...
> > > > I have a Radio Shack model HTX-100 Ten meter transceiver, brand new
and
> > have
> > > > never been used, still in the box. The problem is that I do not have
a
> > > > microphne for
> > > > it and would like to know what other mic could be wired for this

radio.
> > > > Pin input is a 8 pin connecter, would any up and down button mic
work.
> > > > After searching the net I have learned that the mic for this rig has
two
> > > > buttons on it
> > > > For searching the memory channels, up or down.
> > > > Please help ..... Richard.
> > > >
> > > >
> > >
> > >

2577. Drawings on A W3DZZ Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 16:42:29 UTC
From: Thomas <snknutse@online.no>
Message-ID: <PNIYc.3925$g%5.52321@news2.e.nsc.no>
Source record: 90198

Hi group!

I've search on the Internett to find som instruktion on building a W3DZZ antenna.
Have someone some drawings on it?
Or have someone of you drawings on other easy made multiband antenna?

73 de Thomas LA3PNA

2578. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 18:11:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j6rfa8vutfabb@corp.supernews.com>
Source record: 90199

Paul Keinanen wrote:
>
> Due to the skin effect, RF currents only flow on the surface of the
> conductor. At VHF frequencies, the skin depth in copper is only about
> 5 um, in which nearly all RF currents flow, thus the low resistivity
> of this thin surface layer is critical. From RF point of view, it does
> not matter much what is below this surface, so it might be empty (a
> tube) or it might be something with lower conductivity, such as
> stainless steel (with much greater mechanical strength). . .

You're correct that most of the current flows in the first skin depth, but a signficant fraction, 37%, does flow at greater depths. (This number is both the fraction of the surface current density at one skin depth and the fraction of the total current that's below that depth.) The current density at 3 skin depths is 1/e^3 or about 5% of the density at the surface, and at 5 skin depths, 1/e^5 = 0.7% of the density at the surface. So it's reasonable to state that the material below a depth of a *few* skin depths isn't important. At RF with metallic conductors, a tube with any reasonable wall thickness is at least several skin depths thick, so I have no disagreement at all with the conclusion.

Regarding the importance of the material resistivity, it can be argued that it's actually less important at RF than at DC. The reason is that the skin depth is greater when the resistivity is greater. If a material is twice as resistive as, say, copper, the skin depth will be sqrt(2) times as great, resulting in an RF resistance which is sqrt(2) -- about 1.4 times -- greater than copper rather than twice as great.

I hope none of this has detracted the original poster's attention from the good advice given early on in the thread -- that virtually any metal is just fine for his receiving antenna. He won't be able to notice the difference between one and the other. There are two reasons for this:

1. The efficiency of most common antennas is so high that making them out of even quite poor conductors won't reduce the efficiency enough to be able to notice or even measure; and more importantly,

2. Efficiency doesn't matter anyway for HF receiving antennas, except in very special cases where the antenna is extremely inefficient and the receiver noise figure is extraordinarily high.

There are situations where it's important to pay attention to material conductivity and to understand skin effect. This isn't one of them.

Roy Lewallen, W7EL

2579. Re: Drawings on A W3DZZ Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 18:22:02 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <efKYc.7408$En.4485@newssvr23.news.prodigy.com>
Source record: 90200

Thomas wrote:
> Hi group!
>
> I've search on the Internett to find som instruktion on building a W3DZZ
> antenna.
> Have someone some drawings on it?
> Or have someone of you drawings on other easy made multiband antenna?
>
> 73 de Thomas LA3PNA
>
>

http://www.ideascreateideas.com/zzwavenet.html

kd5foy

2580. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 18:57:50 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgvtbeklq1@titan.btinternet.com>
Source record: 90201

There's been much discussion.

The end-to-end RF loss resistance of a half-wave copper dipole is given by -

R = Squareroot(Lambda / 2) / D ohms.

Where Lambda is the free-space wavelength in meters and D is wire or rod diameter in millimetres. Much more simple and easier than measuring it.

For example, the overall loss resistance of a 14 awg, 40m dipole, is 2.73 ohms.

For another metal, multiply R by the square root of resistivity and the square root of permeability, both relative to copper.

Reg, GFGQ

2581. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 19:17:31 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cgvugb$888$1@hercules.btinternet.com>
Source record: 90202

The RF resistance of a wire is the same as the DC resistance of a tube of
the same outer diameter and a wall thickness equal to skin depth.

This allows a pictorial representation of what takes place.

Reg, G4FGQ

2582. Re: Copper antennas:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 20:13:00 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j72ienubetda5@corp.supernews.com>
Source record: 90203

Reg Edwards wrote:

> The RF resistance of a wire is the same as the DC resistance of a tube of
> the same outer diameter and a wall thickness equal to skin depth.

That is correct.

> This allows a pictorial representation of what takes place.

Yes, but not an accurate one.

> ----
> Reg, G4FGQ
>

Roy Lewallen, W7EL

2583. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 20:45:26 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <GIMYc.56138$jZ5.40429@clgrps13>
Source record: 90204

"Bert" ..The HTX-100 is not a phone only rig it does CW as well 73
VE6GTE
"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> I have an extra and would be glad to send it to you, free of charge,
> Richard. It's brand new too, just say the word.
>
> The rig was given to me as a gift and the generous giver had no way of
> knowing that he was giving a phone-only rig to a CW addict. ;-)
>
> --
> 73 de Bert
> WA2SI
> "Richard" <reve6gte@telus.net> wrote in message
> news:YD9Yc.54028$S55.37744@clgrps12...
> > I have a Radio Shack model HTX-100 Ten meter transceiver, brand new and
> have
> > never been used, still in the box. The problem is that I do not have a
> > microphne for
> > it and would like to know what other mic could be wired for this radio.
> > Pin input is a 8 pin connecter, would any up and down button mic work.
> > After searching the net I have learned that the mic for this rig has two
> > buttons on it
> > For searching the memory channels, up or down.
> > Please help ..... Richard.
> >
> >
>
>

2584. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 20:51:31 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <nrMYc.26105$Es2.9327842@news4.srv.hcvlny.cv.net>
Source record: 90205

My mistake, but fear not. I thought you meant the HTX-10. However, my mobile
was a Presiden HR-2510/Lincoln. (AM/FM/LSB/USB/CW version of the HTX-100) I
also have the stock mic for that as well.

I sent you an e-mail and will ship the mic to your supplied shipping
address. Take care es vy...

--
73 de Bert
WA2SI

"Richard" <reve6gte@telus.net> wrote in message
news:GlMYc.56138$jZ5.40429@clgrps13...
> "Bert" ..The HTX-100 is not a phone only rig it does CW as well 73
> VE6GTE
> "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> > I have an extra and would be glad to send it to you, free of charge,
> > Richard. It's brand new too, just say the word.
> >
> > The rig was given to me as a gift and the generous giver had no way of
> > knowing that he was giving a phone-only rig to a CW addict. ;-)
> >
> > --
> > 73 de Bert
> > WA2SI
> > "Richard" <reve6gte@telus.net> wrote in message
> > news:YD9Yc.54028$S55.37744@clgrps12...
> > > I have a Radio Shack model HTX-100 Ten meter transceiver, brand new
and
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> > > never been used, still in the box. The problem is that I do not have a
> > > microphne for
> > > it and would like to know what other mic could be wired for this
radio.
> > > Pin input is a 8 pin connecter, would any up and down button mic work.
> > > After searching the net I have learned that the mic for this rig has
two
> > > buttons on it
> > > For searching the memory channels, up or down.
> > > Please help ..... Richard.
> > >
> > >
> >
> >

>
>

2585. Re: Drawings on A W3DZZ Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 21:23:35 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <rVMYc.4157$UI6.1603@trnddc08>
Source record: 90206

"larry d clark" <buddycl@swbell.net> wrote in message
news:efKYc.7408$En.4485@newssvr23.news.prodigy.com...
> Thomas wrote:
> > Hi group!
> >
> > I've search on the Internett to find som instruktion on building a W3DZZ
> > antenna.
> > Have someone some drawings on it?
> > Or have someone of you drawings on other easy made multiband antenna?
> >
> > 73 de Thomas LA3PNA
> >
> >
>
> http://www.ideascreateideas.com/zzwavenet.html
>
> kd5foy

And the advantage of this over a simple dipole is?

Dale W4OP

2586. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 22:08:59 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ch08mh$c3s$1@newshost.mot.com>
Source record: 90208

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:OXo$oPNgQOMBFAP8@ifwtech.co.uk...
> J. McLaughlin wrote:
> > Most interesting. Thanks.
>
> You're welcome. Just one small point, though:
>
> > I have not used the AEA-CIA for R-X measurements. I always assumed
> >that firmware was used to guess at the sign of X, and it is not too
> >surprising (though disappointing) that the chap who wrote the software
> >might blank out small values of X altogether.
>
> In case anyone's not following this closely, I had been writing about
> the AEA-CIA blanking out values of X less than about 30 ohms. That is
> not "small" by any standard, and it only happened on one side of zero.
> It could not possibly have been a deliberate feature of the programming.
>
> In contrast, the MFJ-269 (and probably the 259B) does deliberately blank
> out small values - truly small values, that is - as X passes through
> zero. This occurs exactly as explained in the manual, and is exactly as
> it should be.
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

Ian, and others,

I have the 269 HF VHF UHF analyzer and noticed something strange. In the "non-50 ohm" Advanced menu 3 mode, with the Zo set to 75 ohms, an otherwise good 75 ohm load (please assume I know how to tell and I used a low frequency to reduce errors) shows something like a 1.3 : 1 SWR. When I called to ask about it, the first tech at MFJ seemed confused and clearly did not understand. Another call, on another day resulted in a better tech, but the response was to send it in for re-calibration. This also seems to be a calculation rather than an adjustment, no?

Once you know Z it is a simple calculation to get to SWR for another Zo. Or have I been smoking a bad brand...?

Woha! I see they have on line calibration manual for the 259B & 269 on line!
http://www.mfjenterprises.com/MFJ-259Bcalibration.php
http://www.mfjenterprises.com/man/pdf/MFJ-269_Calibration.pdf

I don't see anything other than "watch the blinking SWR" .(sounds like a British insult) for the Advance 3 "calibration".

--
Steve N, K,9;d, c. i My email has no u's.

2587. Re: Drawings on A W3DZZ Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 22:20:26 UTC
From: jgboyles@aol.com
Message-ID: <20040830182026.23597.00000028@mb-m11.aol.com>
Source record: 90207

>And the advantage of this over a simple dipole is?
>

You have to use more wire, and more wire is better. At the 64' height, a simple fan dipole or inverted vee for 40 and 80 ought to produce the same results. Efficiency, bandwidth, impedance, and pattern will all be about the same. I wonder what you do if you can't get the center up 64'?
73 Gary N4AST

2588. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-30 22:47:21 UTC
From: richardharrison@webtv.net
Message-ID: <21505-4133AE79-257@storefull-3256.bay.webtv.net>
Source record: 90209

Walter, W2DU wrote:
"Were the rhombic dissipation lines made of high resistance wire?"

The Signal Corps rhombic kits we had were manufactured by the Wind Turbine Company and were most distinguished by a unique one-piece ceramic insulator designed to hold both transmission line cables as it sat atop a support. The lines were made of 3 no. 12 Copperweld wires twisted together. We discarded these as our transmission lines needed larger cable and wider spacing for the same 600-ohm line.

The kit included short tower sections meant as transmission line supports. Triangular tower sections were made of (3) vertical steel rods with wire sides where the wire weaved back and forth between rods. Every steel piece was welded at intersections and assemblies were all hot-dipped galvanized. They were good structures.

The rhombic curtain was a 3-cable type, spread apart vertically at the side towers to reduce impedance variations. The same Copperweld cable, (3) twisted no. 12`s, was used for each of the 3 separate cables, as that used in the transmission line.

An exponentially tapered feedline was used to attach the wide-spaced attachment to the curtain overhead to the more narrow transmission line down below. Its aim was matching 800 ohms to 600 ohms.

My recollection is that the dissipation line at the far end of the rhombic terminus was itself made to match 800 ohms rather than using another tapered line. Too many insulators of varied size, I suppose. So, the down line at the far end had uniform spacing. The dissipation line itself was relatively small stainless steel wires until we replaced them with much larger wire and spacings. It ran back and forth down the centerline of the rhombic.

The rhombics were aimed at central Europe from Portugal. Their reverse radiation bathed nearly all of South America with strong signals for as long as the rhombics were without dissipation lines.

I have no statistics on where the fugitives concentrated. I know that before WW-2, many Europeans had sought opportunity in South America. The war made it plain that the persecuted needed a new haven outside of Europe. It was also clear that the persecutors might escape responsibility if they fled Europe following the war.

I`ve personally been struck by the numbers of people I`ve encountered in Santiago de Chile, Buenos Aires, and Rio de Janeiro, obviously residents, not tourists, speaking Central European languages. A lot of these newer arrivals already had families residing in those countries.

There are a lot of Brits in South America too. In Argentina, many came to do good and stayed to do well. Hurlingjham is a British neighborhood in B.A. with its own polo grounds. People send their fourth generation offspring back "home to the U.K." for education. The main street (high road) of Santiago is Avenida O`Higgins.

Best regards, Richard Harrison, KB5WZI

2589. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 00:40:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j7i84dh8ql880@corp.supernews.com>
Source record: 90210

My MFJ 269 shows the SWR of a Tektronix 75 ohm termination as 1.0:1 up
to 77 MHz when Z0 is set to 75 ohms.

Roy Lewallen, W7EL

Steve Nosko wrote:
>
> Ian, and others,
>
> I have the 269 HF VHF UHF analyzer and noticed something strange. In
> the "non-50 ohm" Advanced menu 3 mode, with the Zo set to 75 ohms, an
> otherwise good 75 ohm load (please assume I know how to tell and I used a
> low frequency to reduce errors) shows something like a 1.3 : 1 SWR. When I
> called to ask about it, the first tech at MFJ seemed confused and clearly
> did not understand. Another call, on another day resulted in a better tech,
> but the response was to send it in for re-calibration. This also seems to
> be a calculation rather than an adjustment, no?
>
> Once you know Z it is a simple calculation to get to SWR for another Zo. Or
> have I been smoking a bad brand...?
>
> Woha! I see they have on line calibration manual for the 259B & 269 on
> line!
> http://www.mfjenterprises.com/MFJ-259Bcalibration.php
> http://www.mfjenterprises.com/man/pdf/MFJ-269_Calibration.pdf
>
> I don't see anything other than "watch the blinking SWR" .(sounds like a
> British insult) for the Advance 3 "calibration".
>

2590. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 01:01:07 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4133cf5a_4@corp.newsgroups.com>
Source record: 90211

Tom Donaly wrote:
> A charge defined at one point can go one direction or another, Cecil,
> as in current, but not two opposing directions at once. And quit telling
> me what
> I believe; I'll tell you. Let me say in terms you might get this time:
> The same infinitesimal charge dQ cannot move in two directions
> at the same time. In order to do that it would have to split in two
> and that would violate the principle of conservation of charge.

Get real, Tom. Does your vehicle battery hold a charge? Is that charge
an infinitesimal point charge? Introducing an infinitesimal charge into
the argument at this late point is known in logic as diverting the issue.

The charge on your battery is a total charge. The charge in a transmission
line is a total charge. The charge of the planet earth is a total charge.
Charge is moving in opposite directions 1/2WL apart in a transmission line.
Charge is NOT limited to an infinitesimal charged particle, as you imply.
Charge is a characteristic of *any* number of particles in *any* magnitude
of volume including, presumably, the entire universe.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2591. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 01:12:06 UTC
From: jcm@power-net.net
Message-ID: <10j7k137o61t92@corp.supernews.com>
Source record: 90212

O'Higgins is not English. He was an important part of the fight to
breakaway from Spain.

I found the descriptions of the rhombics interesting. Thanks.

My son changed my operating system over the weekend. The change was
long overdue. This is first test of whether I am able to post.

73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Richard Harrison" <richardharrison@webtv.net> wrote
<snip>
> There are a lot of Brits in South America too. In Argentina, many came
> to do good and stayed to do well. Hurlingjham is a British neighborhood
> in B.A. with its own polo grounds. People send their fourth generation
> offspring back "home to the U.K." for education. The main street (high
> road) of Santiago is Avenida O`Higgins.
>
> Best regards, Richard Harrison, KB5WZI
>

2592. Mic question (sort of)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 01:15:18 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <GiQYc.9840$QJ3.5336@newssvr21.news.prodigy.com>
Source record: 90213

Question about the HTX 100 mic , jarred my (admittedly), slow to think-about the Motorola (and other commercial radio manufacturer's 450, and 800 MHz
portable radio microphones, with self contained "ANTENNAS" in the cords . 1) can these be accurately modeled, or are too many variables involved (length of mic cord, angle of mic cord, how much streched out, proximity to the body (capacatance))? and, 2 (yes, realize that this is something MUCH less than optimum, but just from curiousosity, how do these compair with a (YUCK) "Rubber Duckie" ?? In other words, would this work with a repeater several miles away? or only limited to the mobile "repeaters" (trunk mounted in say a squad car)? Just curious? Jim NN7K

2593. Re: Mic question (sort of)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 03:54:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j7tj2rijk47af@corp.supernews.com>
Source record: 90214

The problem is the same as for an HT -- your body is just as much a part of the antenna as the "antenna". If you can figure out how to make a good model of your body, you can model it. I'm sure someone, somwhere, has done some work on this but I don't know how good the results might have been.

Roy Lewallen, W7EL

NN7Kex(NOSPAM)k7zfg wrote:

> Question about the HTX 100 mic , jarred my (admittedly), slow to
> think-about the Motorola (and other commercial radio manufacturer's
> 450, and 800 MHz
> portable radio microphones, with self contained "ANTENNAS" in the cords
> . 1) can these be accurately modeled, or are too many variables
> involved (length of mic cord, angle of mic cord, how much streched out,
> proximity to the body (capacatance))? and, 2 (yes, realize that this
> is something MUCH less than optimum, but just from curiousosity, how do
> these compair with a (YUCK) "Rubber Duckie" ?? In other words, would
> this work with a repeater several miles away? or only limited to the
> mobile "repeaters" (trunk mounted in say a squad car)? Just curious?
> Jim NN7K

2594. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 04:46:02 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <eoTYc.9890$QJ3.9188@newssvr21.news.prodigy.com>
Source record: 90215

Cecil Moore wrote:
> Tom Donaly wrote:
>
>> A charge defined at one point can go one direction or another, Cecil,
>> as in current, but not two opposing directions at once. And quit
>> telling me what
>> I believe; I'll tell you. Let me say in terms you might get this time:
>> The same infinitesimal charge dQ cannot move in two directions
>> at the same time. In order to do that it would have to split in two
>> and that would violate the principle of conservation of charge.
>
>
> Get real, Tom. Does your vehicle battery hold a charge? Is that charge
> an infinitesimal point charge? Introducing an infinitesimal charge into
> the argument at this late point is known in logic as diverting the issue.
>
> The charge on your battery is a total charge. The charge in a transmission
> line is a total charge. The charge of the planet earth is a total charge.
> Charge is moving in opposite directions 1/2WL apart in a transmission line.
> Charge is NOT limited to an infinitesimal charged particle, as you imply.
> Charge is a characteristic of *any* number of particles in *any* magnitude
> of volume including, presumably, the entire universe.
> --
> 73, Cecil http://www.qsl.net/w5dxp
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

Go back to bed, Cecil.
73,
Tom Donaly, KA6RUH

2595. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 05:55:09 UTC
From: richardharrison@webtv.net
Message-ID: <339-413412BD-120@storefull-3257.bay.webtv.net>
Source record: 90216

Cecil, W5DXP wrote:
"Charge is NOT limited to an infinitesimal charged particle, as you imply."

True, but charge has a force characteristic. The electron has a charge of -1, or, the value of negative charge carried by an electron is one. A coulomb is (6.281 times 10 to the 18th power) times the charge carried by one electron. A coulomb per second past a particular point is also one ampere.

I have long thought that electrical charges, individually, likely have random motions but that an ampere is the net result of more charges moving one way than another.

With so many small charges involved in a net substantial charge flow, why shouldn`t charges be moving in two or more directions at once?

Best regards, Richard Harrison, KB5WZI

2596. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 06:37:31 UTC
From: Tim Perry <timperryspammenot@adelphia.net>
Message-ID: <S_qdnYhqiY4ugancRVn-rQ@adelphia.com>
Source record: 90217

"Walter Maxwell" <w2du@iag.net> wrote in message
news:r9h6j0hirhu71knlubbia1aak9k4ujm70r@4ax.com...
> On Mon, 30 Aug 2004 01:04:57 -0400, "Tim Perry"
<timperryspammenot@adelphia.net>
> wrote:
>
> >
> >"Walter Maxwell" <w2du@iag.net> wrote in message
> >news:2g6si0519vch9jeeq0mu436t96i27d2vb8@4ax.com...
>
> >snip
>
> >> I was just about to tell you what I use, but Richard, above, beat me to
> >it. For
> >> HF measurements this bridge, the General Radio 1606-A, is the Cadillac
of
> >all
> >> bridges. It 's been the bridge of choice for nearly every AM broadcast
> >engineer
> >> in determining t he impedance of AM broadcast antennas since it came on
> >the
> >> market in 1955.
> >
> >i have yet to see one at a US broadcast station. the meter that is
usually
> >found, and used is the delta OIB-1 or OIB-3
> >http://www.deltaelectronics.com/data/oib1&3.htm
> >
> Hi Tim,
>
> I can't disagree with you here, because my knowledge is from several years
back.
> I'm not familiar the Delta except by reputation--all I've heard is that
it's a
> good instrument. The demise of General Radio is probably one reason the GR
> instrument is no longer the instrument of choice, so the dividing line
between
> use of the GR and the Delta probably defines the end of one era and the
> beginning of another.
>
> Walt, W2DU
>
in part, the OIB (Operating Impedance Bridge) is popular because the normal
transmitter is the (usual) frequency source and interruptions to

transmissions can be brief or non-existent.
in typical use the bridge is inserted using a hot jack or J plug.
the engineer must be careful at all time to avoid touching exposed RF as the resulting burns are painful and long lasting.
the meter itself has some effect on the circuit tuning: sometimes a permanent version is installed at the common point of a phased array.
sometimes special jacks are employed that add a bit of inductance when the meter is removed.

2597. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 06:59:24 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <xYSALtDMHCNBFAhk@ifwtech.co.uk>
Source record: 90219

Steve Nosko wrote:
>
> I have the 269 HF VHF UHF analyzer and noticed something strange.
>In the "non-50 ohm" Advanced menu 3 mode, with the Zo set to 75 ohms,
>an otherwise good 75 ohm load (please assume I know how to tell and I
>used a low frequency to reduce errors) shows something like a 1.3 : 1
>SWR.

And it had correctly showed SWR=1.5 when Zo was set to 50 ohms?

>When I called to ask about it, the first tech at MFJ seemed confused
>and clearly did not understand. Another call, on another day resulted
>in a better tech, but the response was to send it in for
>re-calibration. This also seems to be a calculation rather than an
>adjustment, no?
>
>Once you know Z it is a simple calculation to get to SWR for another
>Zo. Or have I been smoking a bad brand...?
>
I didn't check this feature as part of the review, but it should be simply the inverse ratio of whatever resistances you choose to define as your Zo values.

>Woha! I see they have on line calibration manual for the 259B & 269
>on line!
>http://www.mfjenterprises.com/MFJ-259Bcalibration.php
>http://www.mfjenterprises.com/man/pdf/MFJ-269_Calibration.pdf
>
>I don't see anything other than "watch the blinking SWR" .(sounds like
>a British insult) for the Advance 3 "calibration".
>
The MFJ-269 had to go back after the review (which itself was a few years ago) so unfortunately I'm no longer able to check your findings, Steve.

But don't recalibrate it yet, because that would be stirring-in additional variables which will muddy the waters right now. After the present question has been resolved, you may be able to give the calibration procedure a little more TLC than there was time for on the production-line - but you'll need some precision standards to do it.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2598. I/O TAP for 1,5 MHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 07:05:37 UTC
From: "G.K." <kaluckig@tlen.pl>
Message-ID: <ch17t1$f8e$1@news.onet.pl>
Source record: 90218

hey masters!!:))

do you know any company that produce I/O TAPs (or MULTITAPs) which would be
able to put through the signal of 1,5 MHz freq?
i found MODICON but i'd like to find something cheaper...

can you help me with it?

best regards from poland
G.K.

2599. End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 12:49:08 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <3ms8j0tk2cuhlsr4d8dh1949ds5e0r835b@4ax.com>
Source record: 90220

Do I need a dogbone or egg insulator at each end of my dipole, or can I just splice the antenna wire to the nylon braid that runs to my trees?

Is the answer different for, say, under 100 watts vs 1,000 watts? HF vs. VHF?

I would probably put a small nylon thimble in the nylon braid to provide a decent radius for the wire end.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

2600. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 13:26:17 UTC
From: Vito <vito@crosslink.net>
Message-ID: <41347c7a$0$11980@dingus.crosslink.net>
Source record: 90121

"Ken" <cprstn54zz@att.net> wrote in message
news:3ms8j0tk2cuhlsr4d8dh1949ds5e0r835b@4ax.com...
> Do I need a dogbone or egg insulator at each end of my dipole, or can
> I just splice the antenna wire to the nylon braid that runs to my trees?

Answer: maybe. The nylon braid is OK so long as it never gets wet and
absorbs water or if you let it thoroughly dry before transmitting.

I bought my XYL a high-$$$ all-band vertical and a tuner. It rained hard
one night. The next AM she noted that she had to retune to get the SWR
normal but she fired up her 100 watts and made several QSO's. Then she
barely heard an old friend signing off with another station so she turned on
her 'killer-watt' and called him. They'd barely got thru exchanging calls
and into the pleasantries when she noticed a smell ..... luckily only the
tubes were fried. She turned off the amp and saw that the SWR was out of
sight - until she returned the tuner to it's usual settings for that freq.
I was soon swinging from the trees installing dipoles for each band -- with
insulators!

2601. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 13:43:49 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <sg%Yc.119275$Lj.90194@fed1read03>
Source record: 90122

"Vito" <vito@crosslink.net> wrote

> "Ken" <cprstn54zz@att.net> wrote
> > Do I need a dogbone or egg insulator at each end of my dipole, or can
> > I just splice the antenna wire to the nylon braid that runs to my trees?
>
> Answer: maybe. The nylon braid is OK so long as it never gets wet and
> absorbs water or if you let it thoroughly dry before transmitting.
>
> I bought my XYL a high-$$$ all-band vertical and a tuner. It rained hard
> one night. The next AM she noted that she had to retune to get the SWR
> normal but she fired up her 100 watts and made several QSO's. Then she
> barely heard an old friend signing off with another station so she turned
on
> her 'killer-watt' and called him. They'd barely got thru exchanging calls
> and into the pleasantries when she noticed a smell ..... luckily only the
> tubes were fried. She turned off the amp and saw that the SWR was out of
> sight - until she returned the tuner to it's usual settings for that freq.
> I was soon swinging from the trees installing dipoles for each band --
with
> insulators!

Hi Vito, I don't see any connection between frying tubes on an amp from an "all band vertical" with tuner settings that were not "it's usual settings for that freq", and having no egg-type insulators on the ends of a dipole - did I miss something here?

I never installed the eggs on the lower antennas (fan type) of my dipole (ran out of them at the time), and when it offered SWR of 1:1 performance dry or in pouring rain, I just left the original copper wire to nylon line tie-off alone. Been up for a year with no problems ever.

Jack

2602. Re: Mic question (sort of)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 15:14:23 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41349621.85C117D@shaw.ca>
Source record: 90123

Roy Lewallen wrote:
>
> The problem is the same as for an HT -- your body is just as much a part
> of the antenna as the "antenna". If you can figure out how to make a
> good model of your body, you can model it. I'm sure someone, somwhere,
> has done some work on this but I don't know how good the results might
> have been.
>
> Roy Lewallen, W7EL
>
I haven't really modelled my body however I have come to realize that
it is becoming very broadband at the bottom end! :-)

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2603. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 15:15:06 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <da59j0lo8320fe6bor4qeb3u63lr9mpha4@4ax.com>
Source record: 90124

On Tue, 31 Aug 2004 02:37:31 -0400, "Tim Perry" <timperryspammenot@adelphia.net>
wrote:

>snip

>> Hi Tim,
>>
>> I can't disagree with you here, because my knowledge is from several years
>back.
>> I'm not familiar the Delta except by reputation--all I've heard is that
>it's a
>> good instrument. The demise of General Radio is probably one reason the GR
>> instrument is no longer the instrument of choice, so the dividing line
>between
>> use of the GR and the Delta probably defines the end of one era and the
>> beginning of another.
>>
>> Walt, W2DU
>>
>in part, the OIB (Operating Impedance Bridge) is popular because the normal
>transmitter is the (usual) frequency source and interruptions to
>transmissions can be brief or non-existent.
>in typical use the bridge is inserted using a hot jack or J plug.
>the engineer must be careful at all time to avoid touching exposed RF as the
>resulting burns are painful and long lasting.
>the meter itself has some effect on the circuit tuning: sometimes a
>permanent version is installed at the common point of a phased array.
>sometimes special jacks are employed that add a bit of inductance when the
>meter is removed.
>
Thanks, Tim, for the update on the OIB. It did refresh my memory concerning the
meter being used while the transmitter is on the air. That I now recall.

Walt, W2DU

2604. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 15:25:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413499f2_6@corp.newsgroups.com>
Source record: 90125

Tom Donaly wrote:

> Cecil Moore wrote:
>
>> Tom Donaly wrote:
>>> A charge defined at one point can go one direction or another, Cecil,
>>> as in current, but not two opposing directions at once. And quit
>>> telling me what
>>> I believe; I'll tell you. Let me say in terms you might get this time:
>>> The same infinitesimal charge dQ cannot move in two directions
>>> at the same time. In order to do that it would have to split in two
>>> and that would violate the principle of conservation of charge.
>>
>> Get real, Tom. Does your vehicle battery hold a charge? Is that charge
>> an infinitesimal point charge? Introducing an infinitesimal charge into
>> the argument at this late point is known in logic as diverting the issue.
>>
>> The charge on your battery is a total charge. The charge in a
>> transmission
>> line is a total charge. The charge of the planet earth is a total charge.
>> Charge is moving in opposite directions 1/2WL apart in a transmission
>> line.
>> Charge is NOT limited to an infinitesimal charged particle, as you imply.
>> Charge is a characteristic of *any* number of particles in *any*
>> magnitude
>> of volume including, presumably, the entire universe.

> Go back to bed, Cecil.

I love it when you wax technical, Tom. :-)

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2605. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 15:50:39 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <41349E4F.27072EA7@uci.edu>
Source record: 90126

Richard Harrison wrote:
>
> Cecil, W5DXP wrote:
> "Charge is NOT limited to an infinitesimal charged particle, as you
> imply."
>
> True, but charge has a force characteristic. The electron has a charge
> of -1, or, the value of negative charge carried by an electron is one. A
> coulomb is (6.281 times 10 to the 18th power) times the charge carried
> by one electron. A coulomb per second past a particular point is also
> one ampere.
>
> I have long thought that electrical charges, individually, likely have
> random motions but that an ampere is the net result of more charges
> moving one way than another.
>
> With so many small charges involved in a net substantial charge flow,
> why shouldn`t charges be moving in two or more directions at once?

The simplest answer is that charges move in response to the local
electric field they experience. That field has only one value at that
point, at that instant, and is determined by the superposition of all
local electric fields.

73, AC6XG

2606. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 16:38:50 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ch29nf$m7f$1@newshost.mot.com>
Source record: 90129

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:xYSALtDMHCNBFAhk@ifwtech.co.uk...
> Steve Nosko wrote:
> >
> > I have the 269 HF VHF UHF analyzer and noticed something strange.
> >In the "non-50 ohm" Advanced menu 3 mode, with the Zo set to 75 ohms,
> >an otherwise good 75 ohm load (please assume I know how to tell and I
> >used a low frequency to reduce errors) shows something like a 1.3 : 1
> >SWR.
>
> And it had correctly showed SWR=1.5 when Zo was set to 50 ohms?

Yep! An extensive sheck of known good loads showed that the MFJ was
working as expected with reasonable accuracy. I don't have numbers, but 50
ohm loads looked ok and SWR, Z etc all appeared to be reasonable. Just this
one problem. (I have access to Agilent "N" cal kits)

>
> >When I called to ask about it, the first tech at MFJ seemed confused
> >and clearly did not understand. Another call, on another day resulted
> >in a better tech, but the response was to send it in for
> >re-calibration. This also seems to be a calculation rather than an
> >adjustment, no?
> >
> >Once you know Z it is a simple calculation to get to SWR for another
> >Zo. Or have I been smoking a bad brand...?
> >
> I didn't check this feature as part of the review, but it should be
> simply the inverse ratio of whatever resistances you choose to define as
> your Zo values.
>
> >Woha! I see they have on line calibration manual for the 259B & 269
> >on line!
> >http://www.mfjenterprises.com/MFJ-259Bcalibration.php
> >http://www.mfjenterprises.com/man/pdf/MFJ-269_Calibration.pdf
> >
> >I don't see anything other than "watch the blinking SWR" .(sounds like
> >a British insult) for the Advance 3 "calibration".
> >
> The MFJ-269 had to go back after the review (which itself was a few
> years ago) so unfortunately I'm no longer able to check your findings,
> Steve.
>
> But don't recalibrate it yet, because that would be stirring-in
> additional variables which will muddy the waters right now. After the

> present question has been resolved, you may be able to give the
> calibration procedure a little more TLC than there was time for on the
> production-line - but you'll need some precision standards to do it.
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

The problem is the I found nothing wrong when measuring in all the other modes. Only this one problem and I believe this is a calculation in the microprocessor, not anything that can be "calibrated" to correct. I was asking if this is correct. I also see nothing in the MFJ cal procedure for the 269 for this mode other than "watch the blinkin' SWR symbol" (I indicates you have set a Zo other than 50.
--
Steve N, K,9;d, c. i My email has no u's.

2607. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 16:42:46 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ch29uq$m86$1@newshost.mot.com>
Source record: 90128

Thanks Roy. Mine shows it to measure 75 normally, but 1.3:1 in the Advanced
3 @75 ohms. Either I better change my brand of smokes or the Micro forgot
how to do the calculation... Better go back and try again to see it I
goofed somewhere...but I've done that several times..... . . . . .
. .

Am I correct about this being simply a calculation?

--
Steve N, K,9;d, c. i My email has no u's.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10j7i84dh8ql880@corp.supernews.com...
> My MFJ 269 shows the SWR of a Tektronix 75 ohm termination as 1.0:1 up
> to 77 MHz when Z0 is set to 75 ohms.
>
> Roy Lewallen, W7EL
>
> Steve Nosko wrote:
> >
> > Ian, and others,
> >
> > I have the 269 HF VHF UHF analyzer and noticed something strange.
In
> > the "non-50 ohm" Advanced menu 3 mode, with the Zo set to 75 ohms, an
> > otherwise good 75 ohm load (please assume I know how to tell and I used
a
> > low frequency to reduce errors) shows something like a 1.3 : 1 SWR.
When I
> > called to ask about it, the first tech at MFJ seemed confused and
clearly
> > did not understand. Another call, on another day resulted in a better
tech,
> > but the response was to send it in for re-calibration. This also seems
to
> > be a calculation rather than an adjustment, no?
> >
> > Once you know Z it is a simple calculation to get to SWR for another Zo.
Or
> > have I been smoking a bad brand...?
> >
> > Woha! I see they have on line calibration manual for the 259B & 269 on
> > line!
> > http://www.mfjenterprises.com/MFJ-259Bcalibration.php
> > http://www.mfjenterprises.com/man/pdf/MFJ-269_Calibration.pdf

> >
> > I don't see anything other than "watch the blinking SWR" .(sounds like a
> > British insult) for the Advance 3 "calibration".
> >

2608. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 16:57:03 UTC
From: jcm@power-net.net
Message-ID: <10j9bcr593s4302@corp.supernews.com>
Source record: 90127

Dear Walt:
I sent you an E-mail message (in response to a message you sent to me)
and received an automated message by return indicating that my message had
been placed in a "bad" folder.
Sorry for the post here.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Walter Maxwell" <w2du@iag.net>

2609. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 17:49:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1rc9j0da24mp5j9i04s8m4a981skspcuj9@4ax.com>
Source record: 90130

On Mon, 30 Aug 2004 21:12:06 -0400, <jcm@power-net.net> wrote:

>O'Higgins is not English. He was an important part of the fight to
>breakaway from Spain.

>"Richard Harrison" <richardharrison@webtv.net> wrote
><snip>
>>Hurlingjham is a British neighborhood
>> in B.A. with its own polo grounds. People send their fourth generation
>> offspring back "home to the U.K." for education. The main street (high
>> road) of Santiago is Avenida O`Higgins.

Hi All,

Buenos Aires certainly does not lack for Spanish names in its various barrios and along its streets, but not all of them are mono-cultural. Notable in both their in-country airport and a road nearby is the name Jorge Newberry. The Thames can be found in Palermo. You can stay the night in the Hotel Waldorf or Hotel Lancaster in the Retiro and shop at Kelly's - the Irish Embassy is also located in this barrio. There is also the British Arts Center in the Retiro, as well as the Torre de los Ingleses (a monument to the English) across the street from the Plaza Libertador General San Martin (which contains a wall of names of the fallen in the Malvinas).

When I visited the Cementario de la Recoleta there were plenty of English and Irish surnames from 150 years ago - not unusual at all. However, Buenos Aires also sports a very large population of Italians and is the home to the largest settlement of Jews outside of Europe and the US. When we were in La Plata, we ate at schnitzel at a Bavarian styled restaurant.

73's
Richard Clark, KB7QHC

2610. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 17:56:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aie9j09mhd1m4kn3181i6hqm32vnk72rd6@4ax.com>
Source record: 90132

On Tue, 31 Aug 2004 08:50:39 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>> With so many small charges involved in a net substantial charge flow,
>> why shouldn`t charges be moving in two or more directions at once?
>
>The simplest answer is that charges move in response to the local
>electric field they experience. That field has only one value at that
>point, at that instant, and is determined by the superposition of all
>local electric fields.

If you presume the simplest answer, it still entails complexity in
that this is more correctly called "directed drift" wherein the motion
of the chargeS are random within a locality, but in the aggregate and
as an average tend in one direction.

This sort of dovetails with recent postings by Art speculating about
charge accelerating (without needing power mind you) in the circle of
a loop antenna. The truth of the matter is that those electrons/holes
would never move in a circle, nor even an arc given the short distance
of the net migration being very much less than the diameter of a
small, small wire (and at any HF frequency, infinitesimal).

73's
Richard Clark, KB7QHC

2611. Re: Bob Cain Goes Down And Out In Defeat

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 17:56:26 UTC
From: I Care <icare@whocares.com>
Message-ID: <MPG.1b9e5b906e879d009896ba@netnews.comcast.net>
Source record: 90131
Cross-posted to: rec.audio.pro,rec.audio.tech,rec.radio.amateur.antenna

In article <qN1Zc.47773$%n4.33843@bignews6.bellsouth.net>,
noham@nospam.com says...
>
> "Mark" <makolber@yahoo.com> wrote in message
> news:3367f36e.0408310531.27618723@posting.google.com...
> > OK, Well the fundamental difference is that a radio Tx antenna does
> > not have to move to create a wave. A speaker cone on the other hand
> > is moving to create a sound wave. Relative motion between the Rx and
> > Tx creates Doppler.
>
> Not exactly true, at the very least, the EMF on the antenna will cause it to
> vibrate in the earth's magnetic field, and while this has no connection to
> it's radiation, Tx is still moving relative to Rx, and while this motion is
> extremely small, considering the relative wavelengths and propagation
> speeds, an exact analysis may find that it is similar to the speaker's cone
> motion when reproducing music.
>
> > There is no relative motion for an RF radiator. There is relative
> > motion (in general) for a sound radiator. Bob has come up with some
> > very specific cases where there can be no relative motion between
> > acoustical Rx and Tx so those are exception cases.
> >
> It still has not been established beyond a doubt that there is relative
> motion concerning Tx and Rx with speaker audio reproduction. There remains
> an element doubt that the surface of the cone is really the literal sound
> source. The center of motion of the cone may actually be the literal sound
> source, and this point doesn't move relative to the listener under normal
> circumstances. Thus, it might even be postulated that the Tx/Rx relative
> position with respect to a speaker reproducing music might be more stable
> that that of an antenna radiating RF in the earth's magnetic field.
> I'm not presenting this as an actuality, I'm adding yet another real
> possibility that shows how much we are assuming and how little of what we
> assuming on a basic level is really firmly grounded in fact. The speaker
> Doppler distortion debate has popped up here and there over the last forty
> years are so, with various "proofs" that actually proved very little either
> way, and I suspect that we may be carrying the debate into new territory
> this time. It would behoove us to go all the way back and start from the
> very beginning in examining what we all "know" about the phenomonen. The pay
> off is that if we really are into new territory, we can all take pride in
> our parts in the breaking of new ground. Even if it turns out that the old
> school view is correct, we can still be proud in finally proving it once and
> for all. It's going to take time, but I look at as a win/win situation, no
> matter which side we started out on. :-)

>
>
>
Why not invite some of the rec.radio.amateur.antenna experts to comment?

2612. Re: Bob Cain Goes Down And Out In Defeat

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 18:48:42 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ch2havnfg1@newshost.mot.com>
Source record: 90133
Cross-posted to: rec.audio.pro,rec.audio.tech,rec.radio.amateur.antenna

Good grief!
"I Care" <icare@whocares.com> wrote in message
news:MPG.1b9e5b906e879d009896ba@netnews.comcast.net...
> In article <qN1Zc.47773$%n4.33843@bignews6.bellsouth.net>,
> noham@nospam.com says...
> >
> > "Mark" <makolber@yahoo.com> wrote in message
> > news:3367f36e.0408310531.27618723@posting.google.com...
> > > OK, Well the fundamental difference is that a radio Tx antenna does
> > > not have to move to create a wave. A speaker cone on the other hand
> > > is moving to create a sound wave. Relative motion between the Rx and
> > > Tx creates Doppler.
> >
> > Not exactly true, at the very least, the EMF on the antenna will cause
it to
> > vibrate in the earth's magnetic field, and while this has no connection
to
> > it's radiation, Tx is still moving relative to Rx, and while this motion
is
> > extremely small, considering the relative wavelengths and propagation
> > speeds, an exact analysis may find that it is similar to the speaker's
cone
> > motion when reproducing music.
> >
> > > There is no relative motion for an RF radiator. There is relative
> > > motion (in general) for a sound radiator. Bob has come up with some
> > > very specific cases where there can be no relative motion between
> > > acoustical Rx and Tx so those are exception cases.
> > >
> > It still has not been established beyond a doubt that there is
relative
> > motion concerning Tx and Rx with speaker audio reproduction. There
remains
> > an element doubt that the surface of the cone is really the literal
sound
> > source. The center of motion of the cone may actually be the literal
sound
> > source, and this point doesn't move relative to the listener under
normal
> > circumstances. Thus, it might even be postulated that the Tx/Rx relative
> > position with respect to a speaker reproducing music might be more
stable
> > that that of an antenna radiating RF in the earth's magnetic field.

> > I'm not presenting this as an actuality, I'm adding yet another real
> > possibility that shows how much we are assuming and how little of what
we
> > assuming on a basic level is really firmly grounded in fact. The speaker
> > Doppler distortion debate has popped up here and there over the last
forty
> > years are so, with various "proofs" that actually proved very little
either
> > way, and I suspect that we may be carrying the debate into new territory
> > this time. It would behoove us to go all the way back and start from the
> > very beginning in examining what we all "know" about the phenomonen. The
pay
> > off is that if we really are into new territory, we can all take pride
in
> > our parts in the breaking of new ground. Even if it turns out that the
old
> > school view is correct, we can still be proud in finally proving it once
and
> > for all. It's going to take time, but I look at as a win/win situation,
no
> > matter which side we started out on. :-)
> >
> >
> >
> Why not invite some of the rec.radio.amateur.antenna experts to comment?

2613. Sources of SWR in Florida

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 19:33:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <e9k9j0l99ebts8691g18ufuvtdr5mij8fp@4ax.com>
Source record: 90134

>Three days before Hurricane Charley hit Florida, the 150 or so parakeets
>nesting in a power substation in Deerfield Beach seemed blissfully unconcerned.
>So did the ones in seven huge communal nests on the communications
>tower of the Broward County Sheriff's office a mile or two away.

observe at:
http://graphics7.nytimes.com/images/2004/08/31/science/31anim.184.2.jpg

>Monk parakeets, which seem to have first escaped or been released in
>the 1960's, now number from 150,000 to half a million in Florida, depending
>on who is counting, said Winifred Perkins, environmental relations manager
>for Florida Power and Light. She keeps track because the birds love the
> infrastructure of the power grid. Some of those poles will support nests of
>1,000 pounds or more, and cause power failures and fires, Ms. Perkins said,
>as well as present a hazard for workers.

73's
Richard Clark, KB7QHC

2614. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 19:37:12 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4134d4f3$1_8@corp.newsgroups.com>
Source record: 90135

Jim Kelley wrote:
> The simplest answer is that charges move in response to the local
> electric field they experience. That field has only one value at that
> point, at that instant, and is determined by the superposition of all
> local electric fields.

Hi Jim, we missed you.

For RF, it is certainly possible for the network charges, at t(x), to
be moving in the opposite direction from force exerted by the network
electric field (voltage) at t(x). Remember, dQ/dt can have a different
sign from the sign of the electric field voltage. This ain't DC.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2615. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 20:00:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10j9m66ilkj61b4@corp.supernews.com>
Source record: 90136

I'm sure it's a calculation. I believe it was you who pointed out that once you know the Z, you can calculate the SWR for any Z0. And you don't need to know the sign of the reactance in order to do it. So that's surely the way it's done.

Can't imagine that yours does the calculation different than mine. . . hm, maybe it does. . .mine says "Ver. 1.24" when it starts up. What does yours say?

Roy Lewallen, W7EL

Steve Nosko wrote:

> Thanks Roy. Mine shows it to measure 75 normally, but 1.3:1 in the Advanced
> 3 @75 ohms. Either I better change my brand of smokes or the Micro forgot
> how to do the calculation... Better go back and try again to see it I
> goofed somewhere...but I've done that several times..... . . . . .
> . .
>
>
> Am I correct about this being simply a calculation?
>

2616. Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 20:09:15 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <LV4Zc.2965$683.433941@twister.southeast.rr.com>
Source record: 90137

Hello, my name is Sarah and I am in the fourth grade and want to become a ham like my mother and father. Daddy says I need to learn mosse code. please tell me a good progam that will help me learn.

Sarah

2617. Re: Drawings on A W3DZZ Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 20:45:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <KPidnaKSGdwXfqncRVn-hg@crocker.com>
Source record: 90138

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:rVMYc.4157$UI6.1603@trnddc08...
>
> "larry d clark" <buddycl@swbell.net> wrote in message
> news:efKYc.7408$En.4485@newssvr23.news.prodigy.com...
> > Thomas wrote:
> > > Hi group!
> > >
> > > I've search on the Internett to find som instruktion on building a
W3DZZ
> > > antenna.
> > > Have someone some drawings on it?
> > > Or have someone of you drawings on other easy made multiband antenna?
> > >
> > > 73 de Thomas LA3PNA
> > >
> > >
> >
> > http://www.ideascreateideas.com/zzwavenet.html
> >
> > kd5foy
>
> And the advantage of this over a simple dipole is?

it has a really neat name!

2618. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 20:50:49 UTC
From: "p.paulfriedman" <p.paulfriedman@comcast.net>
Message-ID: <Jw5Zc.93151$Fg5.15181@attbi_s53>
Source record: 90139

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:LV4Zc.2965$683.433941@twister.southeast.rr.com...
> Hello, my name is Sarah and I am in the fourth grade and want to become a
> ham like my mother and father. Daddy says I need to learn mosse code.
> please
> tell me a good progam that will help me learn.
>
> Sarah
>

Hi, Sarah:

There are several very nice programs available. I suggest trying the one at
http://www.qrpham.fsnet.co.uk/CW%20Trainer.htm

It is free!

Good luck and let us know how you are doing.

Paul

2619. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 20:53:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4134e6e0_2@corp.newsgroups.com>
Source record: 90140

Jimmie wrote:
> Hello, my name is Sarah and I am in the fourth grade and want to become a
> ham like my mother and father. Daddy says I need to learn mosse code. please
> tell me a good progam that will help me learn. Sarah

Hi Sarah, you don't need Morse code to become a ham. A good percentage
of hams don't know Morse code. How about you get your Tech license first?
The Tech license doesn't require code. Then you can decide what to do next.
--
73, Cecil W5DXP (I wish my daughter had wanted to learn Morse Code)

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2620. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 22:03:10 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <mMqdnXnYbb0eaqncRVn-vg@comcast.com>
Source record: 90141

You don't need morse code to get a ham licence anymore, but if you want to learn code, I could reccomend SuperMorse or NuMorse This is what worked for me.

Good luck, and I hope to run into you on the air one day.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

2621. Re: Sources of SWR in Florida

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 23:52:03 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <Da8Zc.21$HY1.0@trnddc02>
Source record: 90142

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:e9k9j0l99ebts8691g18ufuvtdr5mij8fp@4ax.com...
>
> >Three days before Hurricane Charley hit Florida, the 150 or so parakeets
> >nesting in a power substation in Deerfield Beach seemed blissfully
unconcerned.
> >So did the ones in seven huge communal nests on the communications
> >tower of the Broward County Sheriff's office a mile or two away.
>
> observe at:
> http://graphics7.nytimes.com/images/2004/08/31/science/31anim.184.2.jpg
>
> >Monk parakeets, which seem to have first escaped or been released in
> >the 1960's, now number from 150,000 to half a million in Florida,
depending
> >on who is counting, said Winifred Perkins, environmental relations
manager
> >for Florida Power and Light. She keeps track because the birds love the
> > infrastructure of the power grid. Some of those poles will support nests
of
> >1,000 pounds or more, and cause power failures and fires, Ms. Perkins
said,
> >as well as present a hazard for workers.
>
> 73's
> Richard Clark, KB7QHC

Having lived in West Palm Beach until recently, I can attest to their
abundance- you always know they are around because the noise is
unbelieveable.
Dale W4OP

2622. Re: Drawings on A W3DZZ Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-08-31 23:55:32 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <Ud8Zc.195$UR2.178@trnddc08>
Source record: 90143

"Dave" <noone@nowhere.com> wrote in message
news:KPidnaKSGdwXfqncRVn-hg@crocker.com...
>
> "Dale Parfitt" <par@parelectronics.com> wrote in message
> news:rVMYc.4157$UI6.1603@trnddc08...
> >
> > "larry d clark" <buddycl@swbell.net> wrote in message
> > news:efKYc.7408$En.4485@newssvr23.news.prodigy.com...
> > > Thomas wrote:
> > > > Hi group!
> > > >
> > > > I've search on the Internett to find som instruktion on building a
> W3DZZ
> > > > antenna.
> > > > Have someone some drawings on it?
> > > > Or have someone of you drawings on other easy made multiband
antenna?
> > > >
> > > > 73 de Thomas LA3PNA
> > > >
> > > >
> > > >
> > > >
> > > > http://www.ideascreateideas.com/zzwavenet.html
> > > >
> > > > kd5foy
> >
> > And the advantage of this over a simple dipole is?
>
> it has a really neat name!
>
> Righto- I missed that point. Just as in the CFA's or EH antennas too!
Makes a lowly dipole or vertical seem downright boring.

W4OP

2623. WIFI DXin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 00:29:51 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <3K8Zc.12018$zE3.10892@newssvr24.news.prodigy.com>
Source record: 90144

I am looking to do some WIFI DX here in the setup I am looking to get 12 to 15 db gain antenna 30ft to 40ft singal booster/amp. How much range would I expect to get with this setup also where can I get this stuff kinda cheap online.

2624. WIFI DXin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 00:29:52 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <4K8Zc.12021$zE3.3102@newssvr24.news.prodigy.com>
Source record: 90145

I am looking to do some WIFI DX here in the setup I am looking to get 12 to 15 db gain antenna 30ft to 40ft singal booster/amp. How much range would I expect to get with this setup also where can I get this stuff kinda cheap online.

2625. WIFI DXin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 00:30:10 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <iK8Zc.12026$zE3.8958@newssvr24.news.prodigy.com>
Source record: 90146

I am looking to do some WIFI DX here in the setup I am looking to get 12 to 15 db gain antenna 30ft to 40ft singal booster/amp. How much range would I expect to get with this setup also where can I get this stuff kinda cheap online.

2626. WIFI DXin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 00:30:27 UTC
From: DJboutit <Recordking@Hotmail.com>
Message-ID: <zK8Zc.12030$zE3.1116@newssvr24.news.prodigy.com>
Source record: 90151

I am looking to do some WIFI DX here in the setup I am looking to get 12 to 15 db gain antenna 30ft to 40ft singal booster/amp. How much range would I expect to get with this setup also where can I get this stuff kinda cheap online.

2627. Re: WIFI DXin

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 00:45:03 UTC
From: dplatt@radagast.org
Message-ID: <10ja6sffmpkh6f8@corp.supernews.com>
Source record: 90147

In article <3K8Zc.12018$zE3.10892@newssvr24.news.prodigy.com>,
DJboutit <Recordking@Hotmail.com> wrote:

>I am looking to do some WIFI DX here in the setup I am looking to get 12 to
>15 db gain antenna 30ft to 40ft singal booster/amp. How much range would I
>expect to get with this setup also where can I get this stuff kinda cheap
>online.

A guy I spoke with a while ago, runs a number of point-to-point networks of 7-10 miles, using standard (nonamplified) 802.11b cards (typically around 30 milliwatts) and parabolic/Yagi gain antennas in the 18-21 dBi range. He said that this combination leaves him with plenty of fade margin... he was not complementary about people who create such links by just "blasting away" with high-power transmitters and low-gain antennas.

On a miles-per-dollar basis, I think you'd get the best results by using high-gain antennas, with the cards / access points mounted right at the antenna. Run an Ethernet cable up the mast, and use the extra two pairs in the cable to carry DC. This will minimize signal loss in the coax, which adds up very fast at 2.4 GHz, and may save you the high cost of low-loss 2.4-gig coax or hardline and the even higher cost of a good amplifier.

Amplifiers are rather expensive, and there are some significant regulatory issues involved in their use. It's not difficult to push your ERP up above the level that Part 15 allows... when you do, you have to start playing by Part 97 rules (assuming that you have a ham license) with all of the frequency and usage restrictions that come with this Part. Some vendors will not sell higher-powered 2.4-gig amplifiers except to people who can prove that they have ham licenses.

http://www.wlanparts.com/ is one source for such antennas.

http://www.maxrad.com/ is another, although their products seem to be commercial-premium-quality and are priced accordingly.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

2628. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:03:12 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <5d9Zc.51289$%n4.47454@bignews6.bellsouth.net>
Source record: 90148

"Jack Painter" <223bthp@cox.net> wrote in message
news:sg%Yc.119275$Lj.90194@fed1read03...
>
> "Vito" <vito@crosslink.net> wrote
>
> > "Ken" <cprstn54zz@att.net> wrote
> > > Do I need a dogbone or egg insulator at each end of my dipole, or can
> > > I just splice the antenna wire to the nylon braid that runs to my
trees?
> >
> > Answer: maybe. The nylon braid is OK so long as it never gets wet and
> > absorbs water or if you let it thoroughly dry before transmitting.
> >
> > I bought my XYL a high-$$$ all-band vertical and a tuner. It rained
hard
> > one night. The next AM she noted that she had to retune to get the SWR
> > normal but she fired up her 100 watts and made several QSO's. Then she
> > barely heard an old friend signing off with another station so she
turned
> on
> > her 'killer-watt' and called him. They'd barely got thru exchanging
calls
> > and into the pleasantries when she noticed a smell ..... luckily only
the
> > tubes were fried. She turned off the amp and saw that the SWR was out
of
> > sight - until she returned the tuner to it's usual settings for that
freq.
> > I was soon swinging from the trees installing dipoles for each band --
> with
> > insulators!
>
> Hi Vito, I don't see any connection between frying tubes on an amp from an
> "all band vertical" with tuner settings that were not "it's usual settings
> for that freq", and having no egg-type insulators on the ends of a
dipole -
> did I miss something here?
>
> I never installed the eggs on the lower antennas (fan type) of my dipole
> (ran out of them at the time), and when it offered SWR of 1:1 performance
> dry or in pouring rain, I just left the original copper wire to nylon line
> tie-off alone. Been up for a year with no problems ever.
>
> Jack

>

Uh, OK if you get away with it. But you do know that the highest currents
are at the ends of a dipole, right? Hence, you *could* set something afire!
No joy.

73
>

2629. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:06:30 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <qg9Zc.3703$683.476145@twister.southeast.rr.com>
Source record: 90150

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:4134e6e0_2@corp.newsgroups.com...
> Jimmie wrote:
> > Hello, my name is Sarah and I am in the fourth grade and want to become
a
> > ham like my mother and father. Daddy says I need to learn mosse code.
please
> > tell me a good progam that will help me learn. Sarah
>
> Hi Sarah, you don't need Morse code to become a ham. A good percentage
> of hams don't know Morse code. How about you get your Tech license first?
> The Tech license doesn't require code. Then you can decide what to do
next.
> --
> 73, Cecil W5DXP (I wish my daughter had wanted to learn Morse Code)
>
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

I like morse code. My dad not done it in 10 yars. He is learning it agin. He
is learning really fast. I do not like his program. I want to build my on
radio.I saw a one tube radio I think I can build if dadd helps. What is a
807? I built a trnsistor blinker in 4H.Daddy calls it a multivibater. I put
all the parts on the board and solered it by myself. It worked the first
time.I learned to solder helping mom and dad make stianed glass stuff.
solder is fun.My friend Jenifer is learning code to. Her dad hams too. Jenny
says that is all he ever does.Mom says time to go to bed.
Sarah

2630. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:27:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ja9cnam7cm182@corp.supernews.com>
Source record: 90149

Jerry wrote:
>
> Uh, OK if you get away with it. But you do know that the highest currents
> are at the ends of a dipole, right? Hence, you *could* set something afire!
> No joy.
>

Actually, the current is lowest and the voltage highest at the ends of a dipole.

Roy Lewallen, W7EL

2631. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:46:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41352b70_2@corp.newsgroups.com>
Source record: 90152

Jerry wrote:
> Uh, OK if you get away with it. But you do know that the highest currents
> are at the ends of a dipole, right?

Everybody knows that you really meant "highest voltage", right?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2632. Re: Bob Cain Goes Down And Out In Defeat

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:49:55 UTC
From: richardharrison@webtv.net
Message-ID: <339-41352AC3-162@storefull-3257.bay.webtv.net>
Source record: 90156

Someone wrote:
"----the EMF on the antenna will cause it to vibrate in the earth`s magnetic field, and while this motion is extremely small, considering the relative wavelength and propagation speeds, an exact analysis may find that it is similar to the speaker`s cone motion when reproducing music."

Inertia causes things at rest to tend to remain at rest and not to respond to casual stimulation. Only the resonant reed responds in the vibrating reed frequency meter. Likewise, one can, with enough excitation, get a d-c meter to try to track the a-c voltage cycle of a very low-frequency oscillator. But, as one increases the frequency a point is soon reached where the d-c meter needle falls to zero and won`t budge in response to the a-c excitation. The needle assembly just has too much inertia to be moved before its excitation impulse is reversed. All the needle can do is stay put.

In the case of an antenna stimulated at a radio frequency, I think physical response is out of the question due to inertia. Further, I`ve observed countless towers and wire antennas audibly singing in the wind, but never noted any Doppler effect on the radio signal.

Best regards, Richard Harrison, KB5WZI

2633. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:52:06 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41352cd2_2@corp.newsgroups.com>
Source record: 90155

Jimmie wrote:
> I like morse code. My dad not done it in 10 yars. He is learning it agin. He
> is learning really fast. I do not like his program. I want to build my on
> radio.I saw a one tube radio I think I can build if dadd helps. What is a
> 807? I built a trnsistor blinker in 4H.Daddy calls it a multivibater. I put
> all the parts on the board and solered it by myself. It worked the first
> time.I learned to solder helping mom and dad make stianed glass stuff.
> solder is fun.My friend Jenifer is learning code to. Her dad hams too. Jenny
> says that is all he ever does.Mom says time to go to bed.
> Sarah

Hi Sarah, You sound a lot like me 52 years ago and you could probably
make a good engineer. enjoy and take care
--
73, Cecil, W5DXP (first licensed as WN5DXP in 1952)

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2634. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:56:39 UTC
From: Ace <ace@telnet.com>
Message-ID: <r%9Zc.94284$Fg5.91718@attbi_s53>
Source record: 90153
Body handling: HTML body converted to readable text

Sarah
Your Pa is right, it's best to learn code if you want to become a good Ham Operator. It really isn't that hard to learn. It's a lot of fun and you never know when it will be needed for emergencies or contests. Go ahead and get your Tech if you want first and then go for an upgrade. You'll need to know code then.
Good luck.

"p.paulfriedman" wrote in message
news:Jw5Zc.93151$Fg5.15181@attbi_s53...
> "Jimmie" wrote in message
> news:LV4Zc.2965$683.433941@twister.southeast.rr.com...
> > Hello, my name is Sarah and I am in the fourth grade and want to become
a
> > ham like my mother and father. Daddy says I need to learn mosse code.
> > please
> > tell me a good progam that will help me learn.
> >
> > Sarah
> >
>
> Hi, Sarah:
>
> There are several very nice programs available. I suggest trying the one
at
> http://www.qrpham.fsnet.co.uk/CW%20Trainer.htm
>
> It is free!
>
> Good luck and let us know how you are doing.
>
> Paul
>
>

2635. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 01:57:17 UTC
From: Me <Me@shadow.orgs>
Message-ID: <Me-A4A476.17571431082004@netnews.worldnet.att.net>
Source record: 90154

In article <5d9Zc.51289$%n4.47454@bignews6.bellsouth.net>,
"Jerry" <joxendi@bellsouth.net> wrote:

> Uh, OK if you get away with it. But you do know that the highest currents
> are at the ends of a dipole, right? Hence, you *could* set something afire!
> No joy.
>
> 73
> >

Well not really, the highest "Voltages" are at the ends of a dipole, and
if one were to exceed the breakdown voltage of the insulating support
line then one could expect the possibility of problem. Other than that
it doesn't really make a difference.

Me

2636. Re: Bob Cain Goes Down And Out In Defeat

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 02:25:26 UTC
From: makolber@yahoo.com
Message-ID: <3367f36e.0408311825.12603a44@posting.google.com>
Source record: 90157
Cross-posted to: rec.audio.pro,rec.audio.tech,rec.radio.amateur.antenna

> > > OK, Well the fundamental difference is that a radio Tx antenna does
> > > not have to move to create a wave. A speaker cone on the other hand
> > > is moving to create a sound wave. Relative motion between the Rx and
> > > Tx creates Doppler.
> >
> > Not exactly true, at the very least, the EMF on the antenna will cause it to
> > vibrate in the earth's magnetic field, and while this has no connection to
> > it's radiation, Tx is still moving relative to Rx, and while this motion is
> > extremely small, considering the relative wavelengths and propagation
> > speeds, an exact analysis may find that it is similar to the speaker's cone
> > motion when reproducing music.

Very very very small especially when the Doppler effect is relative to
the speed of light and not sound. Also it would have to vibrate at RF
frequencies.

> >
> > > There is no relative motion for an RF radiator. There is relative
> > > motion (in general) for a sound radiator. Bob has come up with some
> > > very specific cases where there can be no relative motion between
> > > acoustical Rx and Tx so those are exception cases.
> > >
> > It still has not been established beyond a doubt that there is relative
> > motion concerning Tx and Rx with speaker audio reproduction. There remains
> > an element doubt that the surface of the cone is really the literal sound
> > source. The center of motion of the cone may actually be the literal sound
> > source, and this point doesn't move relative to the listener under normal
> > circumstances.

But if you consider both the 50 Hz and 4 kHz vibrations cone, the
sound source at 4 kHz (wherever you consider it be) is certainly
moving at 50 Hz. Even if you consider the center of motion at 4 kHz
to be the sound source, that center is moving at 50 Hz. That is the
entire point!

Mark

2637. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 02:49:57 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <pNaZc.3739$683.490599@twister.southeast.rr.com>
Source record: 90159

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:LV4Zc.2965$683.433941@twister.southeast.rr.com...
> Hello, my name is Sarah and I am in the fourth grade and want to become a
> ham like my mother and father. Daddy says I need to learn mosse code.
please
> tell me a good progam that will help me learn.
>
> Sarah
>
>
OK Sarah, when did you discover my News Groups???
DADDY

2638. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 02:56:45 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <NTaZc.3740$683.491670@twister.southeast.rr.com>
Source record: 90158

"Ken" <cprstn54zz@att.net> wrote in message
news:3ms8j0tk2cuhlsr4d8dh1949ds5e0r835b@4ax.com...
> Do I need a dogbone or egg insulator at each end of my dipole, or can
> I just splice the antenna wire to the nylon braid that runs to my
> trees?
>
> Is the answer different for, say, under 100 watts vs 1,000 watts? HF
> vs. VHF?
>
> I would probably put a small nylon thimble in the nylon braid to
> provide a decent radius for the wire end.
>
> Ken KC2JDY

I ve done it with 500 watts up to 10 meters, No problems rain or shine.

2639. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 03:48:02 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <SDbZc.15555$Ka6.9724@okepread03>
Source record: 90160

"Jimmie" <Gfender@carolina.rr.com> wrote

> "Ken" <cprstn54zz@att.net> wrote in message
> news:3ms8j0tk2cuhlsr4d8dh1949ds5e0r835b@4ax.com...
> > Do I need a dogbone or egg insulator at each end of my dipole, or can
> > I just splice the antenna wire to the nylon braid that runs to my
> > trees?
> >
> > Is the answer different for, say, under 100 watts vs 1,000 watts? HF
> > vs. VHF?
> >
> > I would probably put a small nylon thimble in the nylon braid to
> > provide a decent radius for the wire end.
> >
> > Ken KC2JDY
>
> I ve done it with 500 watts up to 10 meters, No problems rain or shine.
>

And thus another radio-myth is dispelled....

I doubt anyone disagrees that insulators which help support the radio apparatus industry, er, I mean the ends of the dipole, are "proper" connections. But I'll gladly show pictures to anyone who doubts that the (8.9 mhz length) 1/4 wave ends of my dipole are operating that way. And there is indisputable evidence I have operated this way at very long ranges during icestorms, torrential downpours, and even hurricanes. Never saw a noticeable variation in the consistent 1.1 to 1 SWR as indicated on the tuner. So the 30 odd feet of string holding the ends of the 8mhz components of the dipole are definitely not robbing it or shorting out.

I also doubt Marconi would have a problem with that!

Jack

2640. Heath HD-1481 Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 04:48:31 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <zwcZc.4271$w%6.1029@newsread1.news.pas.earthlink.net>
Source record: 90161
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Anyone know the upper freq limit for these? Can't find my manual.
Will they work at 2M/440?

73, de Hans, K0HB

2641. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 05:00:05 UTC
From: Ace <ace@telnet.com>
Message-ID: <pHcZc.216088$8_6.66483@attbi_s04>
Source record: 90162
Body handling: HTML body converted to readable text

I can't get this software mentioned below
(http://www.qrpham.fsnet.co.uk/CW%20Trainer.htm) to work. It keeps saying
win32 error. I am running windows xp pro. How can I get it to work?
Thanks

to open
"p.paulfriedman" wrote in message
news:Jw5Zc.93151$Fg5.15181@attbi_s53...
> "Jimmie" wrote in message
> news:LV4Zc.2965$683.433941@twister.southeast.rr.com...
> > Hello, my name is Sarah and I am in the fourth grade and want to become
a
> > ham like my mother and father. Daddy says I need to learn mosse code.
> > please
> > tell me a good progam that will help me learn.
> >
> > Sarah
> >
>
> Hi, Sarah:
>
> There are several very nice programs available. I suggest trying the one
at
> http://www.qrpham.fsnet.co.uk/CW%20Trainer.htm
>
> It is free!
>
> Good luck and let us know how you are doing.
>
> Paul
>
>

2642. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 05:04:43 UTC
From: "p.paulfriedman" <p.paulfriedman@comcast.net>
Message-ID: <LLcZc.103208$mD.12078@attbi_s02>
Source record: 90163
Body handling: HTML body converted to readable text

Sarah:

Start the program. Click on Setup. In the lower right of the new window
there is a checkbox labeled Use Windows Callback. Uncheck the box. Click ok.
that did the trick for me. :)

Paul

"Ace" wrote in message
news:pHcZc.216088$8_6.66483@attbi_s04...
>I can't get this software mentioned below
> (http://www.qrpham.fsnet.co.uk/CW%20Trainer.htm) to work. It keeps saying
> win32 error. I am running windows xp pro. How can I get it to work?
> Thanks
>
> to open
> "p.paulfriedman" wrote in message
> news:Jw5Zc.93151$Fg5.15181@attbi_s53...
>> "Jimmie" wrote in message
>> news:LV4Zc.2965$683.433941@twister.southeast.rr.com...
>> > Hello, my name is Sarah and I am in the fourth grade and want to become
> a
>> > ham like my mother and father. Daddy says I need to learn mosse code.
>> > please
>> > tell me a good progam that will help me learn.
>> >
>> > Sarah
>> >
>>
>> Hi, Sarah:
>>
>> There are several very nice programs available. I suggest trying the one
> at
>> http://www.qrpham.fsnet.co.uk/CW%20Trainer.htm
>>
>> It is free!
>>
>> Good luck and let us know how you are doing.
>>
>> Paul
>>
>>
>
>

2643. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 12:59:55 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <flhbj09degpg4k54cl4j1p942i2vp7octo@4ax.com>
Source record: 90164

On Tue, 31 Aug 2004 23:48:02 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Jimmie" <Gfender@carolina.rr.com> wrote
>
>> "Ken" <cprstn54zz@att.net> wrote in message
>> news:3ms8j0tk2cuhlsr4d8dh1949ds5e0r835b@4ax.com...
>> > Do I need a dogbone or egg insulator at each end of my dipole, or can
>> > I just splice the antenna wire to the nylon braid that runs to my
>> > trees?
>> >
>> > Is the answer different for, say, under 100 watts vs 1,000 watts? HF
>> > vs. VHF?
>> >
>> > I would probably put a small nylon thimble in the nylon braid to
>> > provide a decent radius for the wire end.
>> >
>> > Ken KC2JDY
>>
>> I ve done it with 500 watts up to 10 meters, No problems rain or shine.
>>
>
>And thus another radio-myth is dispelled....
>
>I doubt anyone disagrees that insulators which help support the radio
>apparatus industry, er, I mean the ends of the dipole, are "proper"
>connections. But I'll gladly show pictures to anyone who doubts that the
>(8.9 mhz length) 1/4 wave ends of my dipole are operating that way. And
>there is indisputable evidence I have operated this way at very long ranges
>during icestorms, torrential downpours, and even hurricanes. Never saw a
>noticeable variation in the consistent 1.1 to 1 SWR as indicated on the
>tuner. So the 30 odd feet of string holding the ends of the 8mhz components
>of the dipole are definitely not robbing it or shorting out.
>
>I also doubt Marconi would have a problem with that!
>
>Jack
>

I guess it just depends on how often you want to re-hang an antenna.
The antenna wire will certainly cut through the nylon string or cord
far quicker than it will a ceramic or polymer-type dogbone or egg.

Bob
k5qwg

2644. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 13:17:20 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <AZjZc.129040$Lj.28074@fed1read03>
Source record: 90165

"Bob Miller" <rmiller47@satx.rr.com> wrote
> I guess it just depends on how often you want to re-hang an antenna.
> The antenna wire will certainly cut through the nylon string or cord
> far quicker than it will a ceramic or polymer-type dogbone or egg.
>
> Bob
> k5qwg

Hi Bob, if there was any tension on the connection that is certainly correct. I noted that my 8mhz component was so attached - but it only hangs below the main element, which does use the egg-insulators. There is no strain on the lower components at all, so the only factor involved is that there is no noticeable affect from rain, ice etc on a non-insulated connection there. If those elements disconnected at the ends, I could reach them from a tall step ladder. Any high connections that would require antenna lowering to repair should certainly be made with permanence in mind!

73'

Jack

2645. Re: Heath HD-1481 Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 13:37:07 UTC
From: Richard Heindel <rheindel@neo.rr.com>
Message-ID: <7gkZc.627$TH6.457@fe1.columbus.rr.com>
Source record: 90166
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Here's a link for a 2M mod...
http://www.wwc.edu/~frohro/HD-1481/modify_your_heathkit_hd-14.htm

73, Richard WB8KRN

"K&#65533;HB" <groupk0hb@earthlink.net> wrote in message
news:zwcZc.4271$w%6.1029@newsread1.news.pas.earthlink.net...
> Anyone know the upper freq limit for these? Can't find my manual.
> Will they work at 2M/440?
>
> 73, de Hans, K0HB
>
>
>
>

2646. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 14:08:54 UTC
From: "Wolfgang K. Meister" <no.mail@please.com>
Message-ID: <ltlbj0t48o27o7mjr2om31bph6um181nac@4ax.com>
Source record: 90167

On Tue, 31 Aug 2004 20:09:15 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>Daddy says I need to learn mosse code. please
>tell me a good progam that will help me learn.
>

Sarah,

have a look at http://www.qsl.net/g4fon/ , there is the 'Koch'
trainer. One of the best ways to learn CW.

The software is freeware.

73s
Wolfgang
OE1MWW

2647. Re: Heath HD-1481 Antenna Switch

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 14:32:10 UTC
From: K&#65533;HB <groupk0hb@earthlink.net>
Message-ID: <K3lZc.4468$w%6.1038@newsread1.news.pas.earthlink.net>
Source record: 90168
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Thanks!

73, de Hans, K0HB

"Richard Heindel" <rheindel@neo.rr.com> wrote in message
news:7gkZc.627$TH6.457@fe1.columbus.rr.com...
> Here's a link for a 2M mod...
> http://www.wwc.edu/~frohro/HD-1481/modify_your_heathkit_hd-14.htm
>
> 73, Richard WB8KRN
>
>
> "K&#65533;HB" <groupk0hb@earthlink.net> wrote in message
news:zwcZc.4271$w%6.1029@newsread1.news.pas.earthlink.net...
> > Anyone know the upper freq limit for these? Can't find my manual.
> > Will they work at 2M/440?
> >
> > 73, de Hans, K0HB
> >
> >
> >
> >
>
>

2648. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 14:38:40 UTC
From: Micro MegaWatt <MMW@power.net>
Message-ID: <Q9lZc.41104$bT1.39692@fed1read07>
Source record: 90169

>Someone wrote:
>
> >Daddy says I need to learn mosse code. please
> >tell me a good progam that will help me learn.
> >
>
> Sarah,
>
Sarah -- see URL:
http://ac6v.com/morseprograms.htm

Many to choose from
--
One Watt

2649. Microphone help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 17:31:50 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <aInZc.5342$MO3.343132@twister.southeast.rr.com>
Source record: 90170

I have an IC-229H 2M radio that I am using with a HM 56a microphone. The radio keys as soon as I turn it on with the microphone connected. First is this the right mike to use with this radio. Been a few years since I last used it. The connector has been resoldered but I think I did this to fix a broken wire. Wiring diagram with wire colors, pin numbers would be most helpful.Really think it is the right mike and dont really think it is wired wrong but both are possibilities, Any other help would also be appreciated.

Jimmie
kd4rqe

2650. Re: Analyzer evaluation

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 18:10:28 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ch53f8$6uu$1@newshost.mot.com>
Source record: 90073

It's @home & I'm @work. I forwarded it home & will check. Mine is just
past 1 year old. oops.
Steve

--
Steve N, K,9;d, c. i My email has no u's.

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10j9m66ilkj61b4@corp.supernews.com...
> I'm sure it's a calculation. I believe it was you who pointed out that
> once you know the Z, you can calculate the SWR for any Z0. And you don't
> need to know the sign of the reactance in order to do it. So that's
> surely the way it's done.
>
> Can't imagine that yours does the calculation different than mine. . .
> hm, maybe it does. . .mine says "Ver. 1.24" when it starts up. What does
> yours say?
>
> Roy Lewallen, W7EL
>
> Steve Nosko wrote:
>
> > Thanks Roy. Mine shows it to measure 75 normally, but 1.3:1 in the
Advanced
> > 3 @75 ohms. Either I better change my brand of smokes or the Micro
forgot
> > how to do the calculation... Better go back and try again to see it I
> > goofed somewhere...but I've done that several times..... . . . . .
> > . .
> >
> >
> > Am I correct about this being simply a calculation?
> >

2651. unOfficial NEC Archives update

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 18:38:03 UTC
From: Ray Anderson <reanderson@sbcglobal.net>
Message-ID: <fGoZc.10564$QJ3.2529@newssvr21.news.prodigy.com>
Source record: 90074

NEC Archive users:

Lately the server holding the unOfficial NEC Archives (http:///www.qsl.net/wb6tpu) has become so slow as to almost be unusable for downloads due to overloading on the system. (There are presently 50,000+ (yes, 50K) web pages being hosted on the Dual 1.2 GHz Pentium III Linux box that hosts the archives.)

In the interests of keeping the archives a viable and accessible resource I have moved the content of the archives to the server that hosts the www.si-list.org web pages (si-list is a Signal Integrity oriented discussion list). The archives can be accessed at the following address: http://www.si-list.org/swindex2.html

Since the http://www.qsl.net/wb6tpu address is a well known portal (Google shows 29,000+ references on the web) the page pointers on that site have been adjusted to point to the new location at si-list.org.

Downloads that have been taking 'forever' or timing out with a transfer rate of about 0.3kB/s on the qsl.net site now clip along at about 100kB/s on the si-list.org site.

I'll probably be fine-tuning things a bit and removing any bugs that crept in as the result of the transfer, but the new location is accessible and fully functional at this time.

Ray Anderson WB6TPU

2652. Re: Sources of SWR in Florida

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 18:44:10 UTC
From: Darrell Gordon W4CX <w4cx.nospam@arrl.net>
Message-ID: <p26cj0l4hbr3l7fv28v9bhc1q0ma5reve5@4ax.com>
Source record: 90071

Bet that receiver is hearing lots of birdies!

Ughhhhhhhhhhhhh....

On Tue, 31 Aug 2004 19:33:54 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>
>>Three days before Hurricane Charley hit Florida, the 150 or so parakeets
>>nesting in a power substation in Deerfield Beach seemed blissfully unconcerned.
>>So did the ones in seven huge communal nests on the communications
>>tower of the Broward County Sheriff's office a mile or two away.
>
>observe at:
>http://graphics7.nytimes.com/images/2004/08/31/science/31anim.184.2.jpg
>
>>Monk parakeets, which seem to have first escaped or been released in
>>the 1960's, now number from 150,000 to half a million in Florida, depending
>>on who is counting, said Winifred Perkins, environmental relations manager
>>for Florida Power and Light. She keeps track because the birds love the
>> infrastructure of the power grid. Some of those poles will support nests of
>>1,000 pounds or more, and cause power failures and fires, Ms. Perkins said,
>>as well as present a hazard for workers.
>
>73's
>Richard Clark, KB7QHC

2653. Re: Sources of SWR in Florida

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 18:44:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <tNqdnUc6W48ChavcRVn-qg@crocker.com>
Source record: 90072

"Dale Parfitt" <par@parelectronics.com> wrote in message
news:Da8Zc.21$HY1.0@trnddc02...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:e9k9j0l99ebts8691g18ufuvtdr5mij8fp@4ax.com...
> >
> > >Three days before Hurricane Charley hit Florida, the 150 or so
parakeets
> > >nesting in a power substation in Deerfield Beach seemed blissfully
> unconcerned.
> > >So did the ones in seven huge communal nests on the communications
> > >tower of the Broward County Sheriff's office a mile or two away.
> >
> > observe at:
> > http://graphics7.nytimes.com/images/2004/08/31/science/31anim.184.2.jpg
> >
> > >Monk parakeets, which seem to have first escaped or been released in
> > >the 1960's, now number from 150,000 to half a million in Florida,
> depending
> > >on who is counting, said Winifred Perkins, environmental relations
> manager
> > >for Florida Power and Light. She keeps track because the birds love the
> > > infrastructure of the power grid. Some of those poles will support
nests
> of
> > >1,000 pounds or more, and cause power failures and fires, Ms. Perkins
> said,
> > >as well as present a hazard for workers.
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Having lived in West Palm Beach until recently, I can attest to their
> abundance- you always know they are around because the noise is
> unbelieveable.
> Dale W4OP
>
>
anyone got any good recipes??

2654. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 18:58:57 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86vfex4xzi.fsf@duchess.twilley.org>
Source record: 90075

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

>>>>> "Sarah" == Gfender <Gfender@carolina.rr.com> writes:

Sarah> Hello, my name is Sarah and I am in the fourth grade and want
Sarah> to become a ham like my mother and father. Daddy says I need to
Sarah> learn mosse code. please tell me a good progam that will help
Sarah> me learn.

I have some software which generates new MP3s every night using the
Koch method (described elsewhere in this thread) and Farnsworth
spacing. The spacing allows you to concentrate on the characters at
full speed without hearing them rushed together too fast, and the
method allows you to learn one character at a time. All you have to
do is click on the MP3s and they should play just like any music you
play at home. Write down the letters as you hear them, and compare
your results to the text file also on the page, and soon you'll be
able to use CW on the air!

http://www.twilley.org/~jmt/morse/index.html

Sarah> Sarah

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.5 (FreeBSD)

iD8DBQFBNhv2GPFSfAB/ezgRAgTRAKCXAjO84u4Tq3tm1tTfJyoWgFRYRgCgpWlM
WQ14l7/1KPRc7XGV3ejf94M=
=j5Vx
-----END PGP SIGNATURE-----
```

2655. Re: Microphone help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 19:56:18 UTC
From: Charles Hampton KA8JVX <hampton@wvnet.edu>
Message-ID: <41362962.110B@wvnet.edu>
Source record: 90076

Jimmie wrote:
>
> I have an IC-229H 2M radio that I am using with a HM 56a microphone. The
> radio keys as soon as I turn it on with the microphone connected. First is
> this the right mike to use with this radio. Been a few years since I last
> used it. The connector has been resoldered but I think I did this to fix a
> broken wire. Wiring diagram with wire colors, pin numbers would be most
> helpful.Really think it is the right mike and dont really think it is wired
> wrong but both are possibilities, Any other help would also be appreciated.
>
> Jimmie
> kd4rqe

Jimmie,
If any of the touch tone buttons are sticking it will key the
transmitter when you turn it on. I am assuming that the HM56 and HM56A
are the same.
If you need a manual for your 229 H, send me your mailing address and I
will send you a copy free of charge. The file is too large to email.

Charles, ka8jvx

2656. Re: unOfficial NEC Archives update

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 20:25:11 UTC
From: deryck lant <deryck@deryck.com>
Message-ID: <20040901212511708l4@deryck.com>
Source record: 90077

Thank you Ray. You are providing an invaluable resource.

I personally am finding 4NEC2 a powerful tool. and the 3-D graphics output plot truly is superb. This program by Arie far outshines some commercial antenna modelling programs costing upwards of 400 dollars.

73

Deryck G0KOR

The message <fGoZc.10564$QJ3.2529@newssvr21.news.prodigy.com>
from Ray Anderson <reanderson@sbcglobal.net> contains these words:

> NEC Archive users:

> Lately the server holding the unOfficial NEC Archives
> (http:///www.qsl.net/wb6tpu) has become so slow as to almost be unusable
> for downloads due to overloading on the system. (There are presently
> 50,000+ (yes, 50K) web pages being hosted on the Dual 1.2 GHz Pentium
> III Linux box that hosts the archives.)

> In the interests of keeping the archives a viable and accessible
> resource I have moved the content of the archives to the server that
> hosts the www.si-list.org web pages (si-list is a Signal Integrity
> oriented discussion list). The archives can be accessed at the
> following address: http://www.si-list.org/swindex2.html

> Since the http://www.qsl.net/wb6tpu address is a well known portal
> (Google shows 29,000+ references on the web) the page pointers on that
> site have been adjusted to point to the new location at si-list.org.

> Downloads that have been taking 'forever' or timing out with a transfer
> rate of about 0.3kB/s on the qsl.net site now clip along at about
> 100kB/s on the si-list.org site.

> I'll probably be fine-tuning things a bit and removing any bugs that
> crept in as the result of the transfer, but the new location is
> accessible and fully functional at this time.

> Ray Anderson WB6TPU

2657. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 22:44:31 UTC
From: jgboyles@aol.com
Message-ID: <20040901184431.22356.00000012@mb-m16.aol.com>
Source record: 90078

>Do I need a dogbone or egg insulator at each end of my dipole, or can
>I just splice the antenna wire to the nylon braid that runs to my
>trees?

If you use insulated wire for the antenna, just tie the nylon to the wire. Anymore, insulated wire is all I use for my antennas cause Home Depot doesn't sell bare wire small enough. I prefer #18-#20 insulated and stranded (not avail. at HD either). They do have #14.
73 Gary N4AST

2658. Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 23:12:43 UTC
From: msheffie_2000@yahoo.com
Message-ID: <2d14f091.0409011512.2e3a9fe5@posting.google.com>
Source record: 90079

Everybody acknowledges that a good ground is required for any amateur work, especially for a vertical. When I'm putting in an RF ground for either my station or for an antenna system, how do I know when I've achieved "good enough"? What works?

Thanks - Mark Sheffield/N0LF

2659. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-01 23:56:12 UTC
From: dgoncz@aol.com
Message-ID: <20040901195612.28581.00000230@mb-m20.aol.com>
Source record: 90080

>From: DGoncz@aol.com (Doug Goncz)

>I have ordered 16 feet of Belden "Blue Hose" 78 ohm twinaxial cable.

And the impedance of an open dipole in air is about 75 ohms.

Product: 78-OHM TWINAX SOLID COAX CABLE FOIL+BRAID SHIELD 2 CONDUCTOR
20AWG 100FT/REEL NEW BLUE JACKET
Unit Price: $0.40
Quantity: 16
Items Total: $6.40

Order Subtotal: $6.40
Shipping Cost: $10.80
Tax: $0.00
Order Total: $17.20

Yours,
Doug Goncz (ftp://users.aol.com/DGoncz/incoming)
Student member SAE for one year.
I love: Dona, Jeff, Kim, Mom, Neelix, Tasha, and Teri, alphabetically.
I drive: A double-step Thunderbolt with 657% range.

2660. Re: ANTENNA TWINLEAD FEEDER

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 00:39:22 UTC
From: folio <ve2lxNOSPAM@sympatico.ca>
Message-ID: <hZtZc.18265$CG3.1277011@news20.bellglobal.com>
Source record: 90081

> from Gilles ve2lx
>
> 1st time on REC group
>
> I just install temporary an invert dipole feeded with (((tv twinlead
300 ohm)))
>
> actually I have no RF interferences from 160 to 12 m (but only low on 10 m
> but no more usable anyway) compare to my end fed I used before...!
>
> antenna length is 66 ft or 33 ft each side and feeder length about 48
> ft...the dipole is parralele to the back of the 20 appartement's house and
> the full SFC remote coupler or tuner (builted only for wire tuning) is
on
> my back galery 8 ft from radio on 3 rd floor a little above hand rail...!

(((I seen many article on internet and on tech reference mentionning that
when it is humid, damp periode, snow and so on there might be a great
variation of swr during these conditions......?

Is there some one on the groupe that used 300 ohm feeder with a dipole for a
long periode especially during fall and winter to learn about there
experience with that type of installation......?

> wishing to ear soon with

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19

2661. ve2lx@sympatico.ca

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 00:46:29 UTC
From: folio <ve2lxNOSPAM@sympatico.ca>
Message-ID: <E3uZc.18273$CG3.1279387@news20.bellglobal.com>
Source record: 90082

from Gilles ve2lx

1st time on REC group

I just install temporary an invert dipole feeded with (((tv twinlead
300 ohm)))

actually I have no RF interferences from 160 to 12 m (but only low on 10 m
but no more usable anyway) compare to my end fed I used before...!

antenna length is 66 ft or 33 ft each side and feeder length about 48
ft...the dipole is parralele to the back of the 20 appartement's house and
the full SFC remote coupler or tuner (builted only for wire tuning) is
on
my tuner is on the back galery 8 ft from radio on 3 rd floor a little above
the steel hand rail...!

(((I seen many article on internet and on tech reference))) mentionning
that
when it is humid, damp periode, snow and so on there might be a great
variation of swr during these conditions......?

(((Is there some one on the groupe that used))) 300 ohm feeder with a
dipole for a
long periode especially during fall and winter to learn about there
experience with that type of installation......?

wishing to ear soon with

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19

2662. Re: ANTENNA TWINLEAD FEEDER

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 00:56:55 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <rduZc.1016$Wv5.196@newsread3.news.atl.earthlink.net>
Source record: 90083

i have. Don't worry about it. Use it and have fun.

--
Listen to Alternative News and Conversation You Won't Hear On Commercial
Radio.
Visit http://live365.com/stations/pascoradio
YOU HAVE BEEN WARNED!

First Time Users May Be asked To Do A 1 Time Setup.
"folio" <ve2lxNOSPAM@sympatico.ca> wrote in message
news:hZtZc.18265$CG3.1277011@news20.bellglobal.com...
> > from Gilles ve2lx
> >
> > 1st time on REC group
> >
> > I just install temporary an invert dipole feeded with (((tv twinlead
> 300 ohm)))
> >
> > actually I have no RF interferences from 160 to 12 m (but only low on 10
m
> > but no more usable anyway) compare to my end fed I used before...!
> >
> > antenna length is 66 ft or 33 ft each side and feeder length about 48
> > ft...the dipole is parralele to the back of the 20 appartement's house
and
> > the full SFC remote coupler or tuner (builted only for wire tuning) is
> on
> > my back galery 8 ft from radio on 3 rd floor a little above hand
rail...!
>
> (((I seen many article on internet and on tech reference mentionning
that
> when it is humid, damp periode, snow and so on there might be a great
> variation of swr during these conditions......?
>
> Is there some one on the groupe that used 300 ohm feeder with a dipole for
a
> long periode especially during fall and winter to learn about there
> experience with that type of installation......?
>
> > wishing to ear soon with
>
>
>
> ---

> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19
>
>

2663. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 01:12:41 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch5s29$q2j$1@titan.btinternet.com>
Source record: 90084

> Everybody acknowledges that a good ground is required for any amateur
> work, especially for a vertical. When I'm putting in an RF ground for
> either my station or for an antenna system, how do I know when I've
> achieved "good enough"? What works?

==========

Anything will work!

To summarise, begining with 1 radial, all you can do is keep laying more radials until performance ceases to improve. Then that's the best which can be done at your QTH. Performance can be judged by measuring the strength of fixed, stable, not too distant, MF and lower frequency HF radio stations in daylight. There's an effect known as "Reciprocity" which means that an antenna with its ground system is just as good or bad on transmit as it is on receive.

If you increase the number of shallow-buried radials by 50 percent and there's no noticeable improvement then stop laying. Depending on the type of soil you will end up with a number which, in general, will be fewer than what you thought of before you started.

With a vertical, much depends on the lowest frequency of interest. Opinions differ but in my opinion, in average garden soil, there's not much point in laying shallow buried radials longer than 1/10th of a wavelength. They can be shorter in very fertile, fine, damp soil and longer in dry sandy or rocky soil. Fertility is the key. Increase their number according to the above 50 percent guidline.

Layout and bends in the wires are unimportant as are varying lengths. Just spread them out fairly uniformly over the area available. A 180-degree missing sector because the house gets in the way is not of great consequence.

Wire diameter has little electrical effect. Choose wire diameter according to type of soil and wire durability.

Forget about ground rods. A ground rod is little better electrically than a horizontal radial of about the same length. A short ground rod can be used as a common connecting point.

If you like amusing yourself with numbers, and for crude predictions of what to expect, download programs EARTHRES and RADIALS2 from website below. A little knowledge of your local soil resistivity can add much to the interest and help you to forget the lumbago.

.....

Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2664. dipole feeder 300 ohm

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 01:36:59 UTC
From: folio <ve2lxNOSPAM@sympatico.ca>
Message-ID: <_OuZc.18340$CG3.1297850@news20.bellglobal.com>
Source record: 90085

from Gilles ve2lx

1st time on REC group

I just install temporary an invert dipole feeded with (((tv twinlead
300 ohm)))

actually I have no RF interferences from 160 to 12 m (but only low on 10 m
but no more usable anyway) compare to my end fed I used before...!

antenna length is 66 ft or 33 ft each side and feeder length about 48
ft...the dipole is parralele to the back of the 20 appartement's house and
the full SFC remote coupler or tuner (builted only for wire tuning) is
on
my tuner is on the back galery 8 ft from radio on 3 rd floor a little
above
the steel hand rail...!

(((I seen many article on internet and on tech reference))) mentionning
that
when it is humid, damp periode, snow and so on there might be a great
variation of swr during these conditions......?

(((Is there some one on the groupe that used))) 300 ohm feeder with a
dipole for a
long periode especially during fall and winter to learn about that type of
installation......?

wishing to ear soon

Gilles ve2lx

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19

2665. Re: ANTENNA TWINLEAD FEEDER

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 01:49:47 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41367dcc_6@corp.newsgroups.com>
Source record: 90086

folio wrote:
> Is there some one on the groupe that used 300 ohm feeder with a dipole for a
> long periode especially during fall and winter to learn about there
> experience with that type of installation......?

Here is a data point for you. Instead of a tuner, I vary the length of
my "450 ohm" ladder-line to achieve a match at the current maximum
point. In very wet weather, I have seen a two-foot shift in the length
of ladder-line required on 40m from the dry length. 2 feet on 40m is
less than 2% of a wavelength. So I would say the difference between
wet and dry with ladder-line is less than the difference between
insulated and bare wire unless, of course, you lay your ladder-line
on a wet deck and deliberately coat it with soapy water.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2666. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 01:54:52 UTC
From: richardharrison@webtv.net
Message-ID: <29447-41367D6C-131@storefull-3257.bay.webtv.net>
Source record: 90087

Mark Sheffield, N0LF wrote:
"When I`m putting in an RF ground for either my station or for an antenna system, how do I know when I`ve achieved "good enough"?"

Measurement accuracy is sometimes overestimated as Reg Edwards, G4FGQ has often declared in this group. But, you know your RF ground is good enough when expanding the system brings very little improvement.

You need no RF ground for a properly balanced antenna system. For an unbalanced antenna, the ground system is 1/2 of the total antenna system. This system has a total resistance that is the sum of its desired radiation resistance and its undesired loss resistance. Nearly all the undesired loss is in the ground system. So, it`s very important to minimize ground loss in an unbalanced antenna system.

There are two ways to determine that you`ve rid your unbalanced antenna system of loss resistance. If the loss resistance is zero, the driving impedance of the 1/4-wave monopole against ground should measure 36.5 ohms (from 1950 Kraus "Antennas" page 315).

The second way is to measure the field intensity along the earth`s surface at a distance of one mile from the antenna. With 1 watt into the antenna, the field intensity at one mile is 6.5 millivolts/meter with a lossless system (from Kraus as above).

Best regards, Richard Harrison, KB5WZI

2667. Re: ANTENNA TWINLEAD FEEDER

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 02:24:37 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <413684B9.BC5C52AC@shaw.ca>
Source record: 90088

folio wrote:
>
> > from Gilles ve2lx
> >
> > 1st time on REC group
> >
> > I just install temporary an invert dipole feeded with (((tv twinlead
> 300 ohm)))
> >
> > actually I have no RF interferences from 160 to 12 m (but only low on 10 m
> > but no more usable anyway) compare to my end fed I used before...!
> >
> > antenna length is 66 ft or 33 ft each side and feeder length about 48
> > ft...the dipole is parralele to the back of the 20 appartement's house and
> > the full SFC remote coupler or tuner (builted only for wire tuning) is
> on
> > my back galery 8 ft from radio on 3 rd floor a little above hand rail...!
>
> (((I seen many article on internet and on tech reference mentionning that
> when it is humid, damp periode, snow and so on there might be a great
> variation of swr during these conditions......?
>
> Is there some one on the groupe that used 300 ohm feeder with a dipole for a
> long periode especially during fall and winter to learn about there
> experience with that type of installation......?
>
> > wishing to ear soon with
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19

Used 50 ft of the cheapest TV twinlead (300ohm) I could find because it was a
temporary test. The antenna worked so well that I left it up from 83 to 96
through all kinds of weather including harsh Alberta winters. I never
noticed any noticeable SWR changes with weather, and when I took it down
I saved the twinlead for future use -- it was as good as new!

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)

58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2668. Re: dipole feeder 300 ohm

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 02:29:25 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <413685D9.73A1440C@shaw.ca>
Source record: 90089

folio wrote:
>
> from Gilles ve2lx
>
.....
>
> (((Is there some one on the groupe that used))) 300 ohm feeder with a
> dipole for a
> long periode especially during fall and winter to learn about that type of
> installation......?
>
> wishing to ear soon
>
> Gilles ve2lx
>
> Gilles,
I Used 50 ft of the cheapest TV twinlead (300ohm) I could find because it was
a
temporary test. The antenna worked so well that I left it up from 83 to 96
through all kinds of weather including harsh Alberta winters. I never
noticed any noticeable SWR changes with weather, and when I took it down
I saved the twinlead for future use -- it was as good as new!
Bon Chance!
Irv VE6BP

--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

2669. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 02:30:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch60jbsbk1@hercules.btinternet.com>
Source record: 90090

I should have mentioned. When measuring signal strengths as a measure of performance there's safety in numbers. Take the average of a fair number of transmissions, all well above the noise level, at about the same time each day, using your most stable S-meter with the receiver gain turned down such that the meter deflection is on the most sensitive sector of its scale. Allow the receiver to warm up for the same length of time on each occasion it is used.

S-meter calibration doesn't matter two hoots.

And once set, don't ever touch the receiver gain control.

You should take all these precautions from the time when you have laid only one radial. You will not wish to dig up already laid radials in order to re-measure the earlier ones you forgot to treat in the standard manner.

It will be appreciated, to make tests during radial-laying operations by asking for signal strength reports from your many friends, using THEIR S-meters, will result in you losing them.

Incidentally, when "I" used this method of testing antenna efficiency I stopped at 8, 10 feet, radials with a 3 feet rod at the end of each. This included the domestic incoming main water pipe which made no difference when THAT was connected. So I stopped.

But my soil resistivity is only about 70 ohm-metres. I can grow anything in my garden. At present it is covered with a dense growth of 3 feet high weeds except for a small patch which I use to feed the birds. As if they didn't get enough to eat anyhow. With the trees and overgrown bushes it is a wild-life sanctuary for frogs, rats, squirrels and hedgehogs. The only complaints I get are from the neighbours. But its stopped them complaining about TVI.

Reg, G4FGQ

2670. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 02:52:52 UTC
From: Mark Sheffield <sheffield@earthlink.net>
Message-ID: <a92dj0h8bc6lv1f977cgc27q6h7o55uvk5@4ax.com>
Source record: 90091

Thank you very much - these are very helpful ways to approach the problem.

Best Regards,

Mark Sheffield/n0lf

2671. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 03:06:57 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <l7wZc.58821$jZ5.3969@clgrps13>
Source record: 90092

HI Bert.
Hope all is well es hpe u received my shipping Address.

"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:nrMYc.26105$Es2.9327842@news4.srv.hcvlny.cv.net...
> My mistake, but fear not. I thought you meant the HTX-10. However, my
mobile
> was a Presiden HR-2510/Lincoln. (AM/FM/LSB/USB/CW version of the HTX-100)
I
> also have the stock mic for that as well.
>
> I sent you an e-mail and will ship the mic to your supplied shipping
> address. Take care es vy...
>
> --
> 73 de Bert
> WA2SI
>
> "Richard" <reve6gte@telus.net> wrote in message
> news:GlMYc.56138$jZ5.40429@clgrps13...
> > "Bert" ..The HTX-100 is not a phone only rig it does CW as well 73
> > VE6GTE
> > "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> > news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> > > I have an extra and would be glad to send it to you, free of charge,
> > > Richard. It's brand new too, just say the word.
> > >
> > > The rig was given to me as a gift and the generous giver had no way of
> > > knowing that he was giving a phone-only rig to a CW addict. ;-)
> > >
> > > --
> > > 73 de Bert
> > > WA2SI
> > > "Richard" <reve6gte@telus.net> wrote in message
> > > news:YD9Yc.54028$S55.37744@clgrps12...
> > > > I have a Radio Shack model HTX-100 Ten meter transceiver, brand new
> and
> > > have
> > > > never been used, still in the box. The problem is that I do not have
a
> > > > microphne for
> > > > it and would like to know what other mic could be wired for this
> radio.
> > > > Pin input is a 8 pin connecter, would any up and down button mic

work.
> > > > After searching the net I have learned that the mic for this rig has
> two
> > > > > buttons on it
> > > > > For searching the memory channels, up or down.
> > > > > Please help ..... Richard.
> > > > >
> > > > >
> > > >
> > > >
> > >
> > >
>
>

2672. Re: Stainless Steel Wire - OK for antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 03:30:00 UTC
From: richardharrison@webtv.net
Message-ID: <29447-413693B8-150@storefull-3257.bay.webtv.net>
Source record: 90093

Richard Clark wrote:
"You can stay the night in the Hotel Waldorf or the Hotel Lancaster in the Retiro and shop at Kelly`s-"

I usually stayed at the Claridge just off the pedestrian shopping street La Calle Florida. The company installed me there on my first arrival in Buenos Aires as I had no preference. When I returned there after a 6 month absence and was joyfully greeted by my name from the doorman. I was hooked.

On one of my 6 month tours in Argentina, I decided to give the Sussex Hotel across the street from the Claridge a try as all the oil field hands seemed to stay there. I arrived out of cigarettes, dying for a smoke, and asked the desk clerk if the Sussex had a smoke shop. When the clerk said no, I told him to send my luggage on up to my room while I shopped for cigarettes.

The clerk spyed me when I re-entered the hotel and called me over to give me a message from my wife who was very eager to see me. I thanked him although at that time I`d never been married, but I had discovered the main attraction of the Sussex Hotel! And they say a gringo is no damn good when he speaks Spanish!

Best regards, Richard Harrison, KB5WZI

2673. Heavy Duty Antenna Wire.. for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 03:49:01 UTC
From: k0owo.bill@gmail.com
Message-ID: <21c32c64.0409011949.38b11f51@posting.google.com>
Source record: 90094

I have four lots of NEW Heavy Duty Antenna Wire for sale on ebay.

Click here to see all four listings:
http://search.ebay.com/heavy-duty-antenna-wire_W0QQsosortpropertyZ1

Thanks,

Bill

2674. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 03:53:46 UTC
From: GW <look@signature_to.reply>
Message-ID: <ePwZc.656$N4.495@newsread3.news.pas.earthlink.net>
Source record: 90095

I have a question similar to but different from the one posted a few lines below. How do you determine the quality of an antenna ground at HF on an absolute basis? Not how well have I maximized what Mother Nature gave me at my QTH by adding radials, but how good is my ground compared to other stations' grounds at other locations? I have read about the advantages of seawater, ground conductivity etc as guidelines, but how is overall ground quality (not just soil resistivity) determined objectively if indeed that is possible at all?

George K6GW

2675. Re: dipole feeder 300 ohm

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 04:58:31 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <9LxZc.51839$N11.3794@bignews5.bellsouth.net>
Source record: 90096

Used 300-ohm with no problem - but remember to use strain relief at
connections

"folio" <ve2lxNOSPAM@sympatico.ca> wrote in message
news:_OuZc.18340$CG3.1297850@news20.bellglobal.com...
> from Gilles ve2lx
>
> 1st time on REC group
>
> I just install temporary an invert dipole feeded with (((tv twinlead
> 300 ohm)))
>
> actually I have no RF interferences from 160 to 12 m (but only low on 10
m
> but no more usable anyway) compare to my end fed I used before...!
>
> antenna length is 66 ft or 33 ft each side and feeder length about 48
> ft...the dipole is parralele to the back of the 20 appartement's house
and
> the full SFC remote coupler or tuner (builted only for wire tuning) is
> on
> my tuner is on the back galery 8 ft from radio on 3 rd floor a little
> above
> the steel hand rail...!
>
> (((I seen many article on internet and on tech reference)))
mentionning
> that
> when it is humid, damp periode, snow and so on there might be a great
> variation of swr during these conditions......?
>
> (((Is there some one on the groupe that used))) 300 ohm feeder with a
> dipole for a
> long periode especially during fall and winter to learn about that type
of
> installation......?
>
> wishing to ear soon
>
> Gilles ve2lx
>
>
>
> ---

> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.742 / Virus Database: 495 - Release Date: 2004-08-19
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2676. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 05:02:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ZOxZc.51878$N11.41078@bignews5.bellsouth.net>
Source record: 90097

instead of radials, you COULD just make the grounded side vertical - into a well, I THINK???
(I'm assuming that would work - but never tried it - my post-hole digger handles were too short)

"MarkS" <msheffie_2000@yahoo.com> wrote in message news:2d14f091.0409011512.2e3a9fe5@posting.google.com...
> Everybody acknowledges that a good ground is required for any amateur
> work, especially for a vertical. When I'm putting in an RF ground for
> either my station or for an antenna system, how do I know when I've
> achieved "good enough"? What works?
>
> Thanks - Mark Sheffield/N0LF

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

2677. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 06:37:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vdedj0pr5a5pcaup0oirf7j5am4bovqolt@4ax.com>
Source record: 90098

On Thu, 02 Sep 2004 03:53:46 GMT, "GW" <look@signature_to.reply>
wrote:

>I have a question similar to but different from the one posted a few lines
>below. How do you determine the quality of an antenna ground at HF on an
>absolute basis? Not how well have I maximized what Mother Nature gave me at
>my QTH by adding radials, but how good is my ground compared to other
>stations' grounds at other locations? I have read about the advantages of
>seawater, ground conductivity etc as guidelines, but how is overall ground
>quality (not just soil resistivity) determined objectively if indeed that is
>possible at all?

Hi George,

You compare a measured value with the theoretical, the difference is
loss. Less loss = better (objective goal expressed subjectively).

To state the objective goal objectively, you describe the difference
in dB. However, this quickly devolves to a subjective test, because
only your contact can appreciate the difference, and too often the
difference is less than many other factors of variability (like
fading).

So, let's put this in objective terms. With a dozen radials down, you
could double or quadruple that to achieve 2dB more power out. 2dB on
the conventional S-Meter may barely register more than a needle's
width change while your signal is otherwise dropping and rising 10dB
through a QSO. Go the limit (theoretical of course) of 120 radials
and you perhaps achieve 3 to 4 dB or two needle's widths.

Another objective test is to measure the resistance and compare it to
theoretical. However, take care to observe that theory covers a lot
of ground (no pun) principally depending upon the thickness of the
radiator. To take a useful and common indicator, that value would be
36 Ohms. If you measured 50 Ohms, the excess 14 Ohms could be thought
to be residing in poor connections and the loss of ground. You would
then tighten connections and add radials to shield against ground
loss. Hence by these actions, resistance would lower, and oddly (that
is, in contradiction to misguided expectations) SWR would rise. It is
unlikely you will add enough radials to achieve theoretical, but close
enough counts in RF, hand grenades, and H-Bombs.

It is called the law of diminishing returns (a business concept) where
the more you put into the ground is not matched in continued, improved
performance. It is the first few that count the most.

73's
Richard Clark, KB7QHC

2678. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 10:57:06 UTC
From: "Dr. Daffodil Swain" <wa4jm@earthlink.net>
Message-ID: <60DZc.1922$Wv5.699@newsread3.news.atl.earthlink.net>
Source record: 90099

Nice Site,

John-WA4JM

--

2679. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 11:12:42 UTC
From: richardharrison@webtv.net
Message-ID: <29126-4137002A-193@storefull-3252.bay.webtv.net>
Source record: 90100

Hal Rosser wrote:
"Instead of radials, you dould just make the ground side vertical into a well, I think?"

Not at HF, efficiently, because the ground penetration depth decreases for an RF wave as frequency increases. It is "skin effect" which decreases the depth with the square root of the frequency.

A steel well casing may make a good ground return at LF but not at HF.

Best regards, Richard Harrison, KB5WZI

2680. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 11:46:28 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pofg6Fmql7gU1@uni-berlin.de>
Source record: 90101

GW asked (clip):
> How do you determine the quality of an antenna ground at HF
>on an absolute basis? Not how well have I maximized what
>Mother Nature gave me at my QTH by adding radials, but
>how good is my ground compared to other stations' grounds
>at other locations?

A low-resistance ground connection for a transmit antenna is important to the received signal level only when the antenna design requires it as a reference for its driven element, such as with the vertical radiators used in MW broadcasting.

Most HF/VHF/UHF transmit antennas do not need, or use an earth ground for efficient radiation. As practical proof of this, recall that airborne antennas have no connection at all to earth ground, but still work just fine. And the transmit antennas used in commercial FM & TV broadcast are installed at the top of a tall tower, many wavelengths (and ohms) above earth potential. The tower is grounded for safety reasons, but the radiation patterns and received signal levels from those antennas would be the same even if that tower was not grounded.

RF

Visit http://rfry.org for FM broadcast RF system papers.

2681. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 11:49:23 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10je27ai72vjj82@corp.supernews.com>
Source record: 90102

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29126-4137002A-193@storefull-3252.bay.webtv.net...
> Hal Rosser wrote:
> "Instead of radials, you dould just make the ground side vertical into a
> well, I think?"
>
> Not at HF, efficiently, because the ground penetration depth decreases
> for an RF wave as frequency increases. It is "skin effect" which
> decreases the depth with the square root of the frequency.
>
> A steel well casing may make a good ground return at LF but not at HF.
>
> Best regards, Richard Harrison, KB5WZI
>
Keep them earthworms warm at nite.
73
H.
NQ5H

2682. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 11:52:28 UTC
From: richardharrison@webtv.net
Message-ID: <29126-4137097C-197@storefull-3252.bay.webtv.net>
Source record: 90103

Yuri wrote:
"Not really. It is more like saying there is a word or discussion about
2 wire beverages on page so and so (last few days)."

Speaking of pages, there is a nice picture of Yuri Blanarovich, VE3BMV
(formerly OK5BU) on page 81 of the March 1973 edition of CQ magazine.

Many of us may have made a nice picture in 1973.

Best regards, Richard Harrison, KB5WZI

2683. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 13:12:33 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pokhjFng071U1@uni-berlin.de>
Source record: 90104

"Bill Turner" wrote
> If you have an impedance analyzer you can trust, and if you are using a
> 1/4 wave vertical (full size, not loaded), and if your ground is
> perfect, you should measure about 36 ohms at the feedpoint. Any
> measurement higher than that is due to ground loss.

But in practical terms, how do you get a "perfect" earth ground reference
for the analyzer to use when making the measurement?

RF

2684. wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 13:29:24 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <0m7ej0hebs5pe9v89ssh9ulkv6su5njss2@4ax.com>
Source record: 90105

Philadelphia is considering a wireless Internet system that would
blanket the entire city via hundreds of small transmitters.

See
http://news.yahoo.com/news?tmpl=story&cid=562&u=/ap/20040901/ap_on_hi_te/wireless_cities_7
&printer=1

Would this interfere with ham radio?

Sounds like a possible nice alternative to BPL :-)

Bob
k5qwg

2685. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 13:56:25 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41372911_3@news1.prserv.net>
Source record: 90106

George:

There is a published, and generally accepted method for measurement of complex impedance of earth, using standard lab instruments. I think it is in one of the CCIR publications, but don't have time to go dig it out at this moment. However, there are many radio engineers who will (likely correctly) question just how closely the results of these measurements reflect actual performance for an antenna site. One immediately evident reason is that the earth at the first reflection point may make more difference in the propagated signal at any given elevation angle than the characteristics immediately under the antenna.

--
Crazy George
Remove N O and S P A M imbedded in return address
"GW" <look@signature_to.reply> wrote in message
news:ePwZc.656$N4.495@newsread3.news.pas.earthlink.net...
> I have a question similar to but different from the one posted a few lines
> below. How do you determine the quality of an antenna ground at HF on an
> absolute basis? Not how well have I maximized what Mother Nature gave me
at
> my QTH by adding radials, but how good is my ground compared to other
> stations' grounds at other locations? I have read about the advantages of
> seawater, ground conductivity etc as guidelines, but how is overall ground
> quality (not just soil resistivity) determined objectively if indeed that
is
> possible at all?
>
> George K6GW
>
>
>

2686. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 14:27:37 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch7akpqpb1@titan.btinternet.com>
Source record: 90107

"GW" wrote
> I have a question similar to but different from the one posted a few lines
> below. How do you determine the quality of an antenna ground at HF on an
> absolute basis? Not how well have I maximized what Mother Nature gave me
at
> my QTH by adding radials, but how good is my ground compared to other
> stations' grounds at other locations? I have read about the advantages of
> seawater, ground conductivity etc as guidelines, but how is overall ground
> quality (not just soil resistivity) determined objectively if indeed that
is
> possible at all?
>
==========

The performance of a ground electrode system cannot be separated from that of an associated antenna. But at least the antenna can be standardised by assuming it to be a simple vertical of given height. And we won't go far wrong by assuming the antenna efficiency to be 100 percent.

Engineering Quality is a numerical measure of how well something serves its intended purpose.

Since the purpose of a ground + antenna system is to radiate em waves the only possible numerical measure of Quality is radiating power efficiency measured as a percentage.

With beautiful and fortunate simplicity, the radiating efficiency of such a system is given by -

Eff = Rrad / (Rrad + Rloss) times 100%.

where Rrad is the antenna's radiation resistance looking into the base of the antenna, and Rloss is the resistance looking into the focal point of the ground electrode system, immediately under the antenna, such as a set of radial wires. Or it may be a single rod.

It is impossible to separately measure Rrad and Rloss. But Rrad can be calculated from the antenna's height and diameter and the two can be measured together. From the combined single measurement the efficiency can easily be calculated.

And that's where we part company with simplicity.

To calculate your "Quality on an absolute basis" of just the single ground rod involves a list of numerical variables as long as your arm. To calculate Quality of a system of radials imposes an impossible, intractible problem in statistics.

To compare one system with another would involve everybody with several lifetimes of fundamental research, measurement and guesswork which would get nobody anywhere.

However, because radio is by far the most inexact of all the engineering sciences, it doesn't matter a toss. All measurements are subject to error. In most of which even the standard deviations can only be guessed at. When will the next flare occur on our unstable Sun?

Radio engineers are quite accustomed to allowing safety margins of plus or minus 15 or 20 dB along propagation paths. Even then distortion and error rates are quoted. Brute force and ignorance and a lot of luck prevail.

So it doesn't matter whether or not Rloss lies between 1 and 10 ohms when used with your top-band inverted-L and you havn't the foggiest idea what the soil resistivity is in YOUR back yard.

Incidentally, ground loss is not only smaller in sea water, it is also smaller with soil resistivities of several thousand ohms and greater. There's a maximum somewhere in between.

To crudely estimate ground loss, download program RADIALS2 from website below. It's all crammed into only 70 kilo-bytes. Nobody has yet complained it gives the wrong answers.
--
.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

2687. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 14:36:53 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040902103653.17534.00000014@mb-m20.aol.com>
Source record: 90108

>
>Speaking of pages, there is a nice picture of Yuri Blanarovich, VE3BMV
>(formerly OK5BU) on page 81 of the March 1973 edition of CQ magazine.
>
>Many of us may have made a nice picture in 1973.
>
>Best regards, Richard Harrison, KB5WZI
>

Thank you kindly. We were young and handsome, now just.... :-)
There is the CQ Magazine cover boy also at
http://members.aol.com/ve3bmv/BMVcover.htm

Brings back memories, before I had the job after landing in VE3 I went for my license, before I furnished the apartment, I bought FTDX400. The first vacation when I took off for expedition to FP8, I got "stuck" in NYC, met my sweethard, got engaged in 3 weeks. The rest is history - first, Big Bertha and then couple of kids and move to the Land of Free and Home of the Brave.
God Bless America, President Bush and Zell Miller.

73 Yuri K3BU.us

2688. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 14:39:46 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040902103946.17534.00000015@mb-m20.aol.com>
Source record: 90109

>
>Would this interfere with ham radio?
>
>Sounds like a possible nice alternative to BPL :-)
>
>Bob
>k5qwg
>

Unless we have bad harmonics way up on microwaves, it should not. Looks like NYC already has WiFi distribution, you can see WiFi Hotspot antennas on the top of the public phone booths.

Yuri, K3BU.us

2689. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 15:44:56 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch7f5oegv1@sparta.btinternet.com>
Source record: 90110

> But in practical terms, how do you get a "perfect" earth ground reference
> for the analyzer to use when making the measurement?
>
==========

You don't need a "perfect earth" because that is precisely the quantity you are trying to measure.

The only "perfect" thing is the 36 ohms which is the calculated value of the 1/4-wave antenna's radiation resistance.

But it is not essential to have an antenna as tall as a quarterwave to find the earth-loss resistance. There's not many people who can erect a 1/4-wave vertical at 160 meters.

The 'perfect' radiation resistance of an antenna shorter than 1/4-wave is given with sufficient accuracy by -

Rrad = Square(24 * Height / Wavelength) ohms.

Of course, an antenna shorter than 1/4-wave has reactance. But this can be tuned out with any coil which has a negligible loss resistance compared with antenna resistance.

Make the measurement at the resonant frequency of coil + antenna whatever it may be. The antenna analyser will tell you when you are at resonance. Vary frequency for the minimum pure resistance. And that is the resistance you are looking for.

The lower the measurement frequency the more easy and accurate the measurement provided it is not overdone. The earth resistance measurement doesn't have to be made at the same frequency the antenna is to be used at. It can be appreciably lower.

The great advantage of these one-hand held, battery-driven, antenna analysers is that the connecting wires can be kept very short, ie., much shorter than a 1/4-wavelength.

They are sufficiently accurate for this sort of job. And don't be afraid of lying on your belly to read the meter. The best things since sliced bread.

Reg, G4FGQ.

2690. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 15:55:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch7fonfio1@sparta.btinternet.com>
Source record: 90111

"Bob Miller" <rmiller47@satx.rr.com> wrote in message
news:0m7ej0hebs5pe9v89ssh9ulkv6su5njss2@4ax.com...
> Philadelphia is considering a wireless Internet system that would
> blanket the entire city via hundreds of small transmitters.
>
> See
>
http://news.yahoo.com/news?tmpl=story&cid=562&u=/ap/20040901/ap_on_hi_te/wireless_cities_7
&printer=1
>
> Would this interfere with ham radio?
>
> Sounds like a possible nice alternative to BPL :-)
>
> Bob
> k5qwg

==========

It's not the UHF frequency of the very local mini transmitters which cause
the interference.

It is the broadband signals which come in via the phone wires between
computer and the local telephone exchange. They mostly affect the 160 and 80
meter bands.

2691. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 16:21:06 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ch7hecith1@newshost.mot.com>
Source record: 90115

"Yuri Blanarovich" <k3bu@aol.comNoUsama> wrote in message
news:20040902103946.17534.00000015@mb-m20.aol.com...
> >
> >Would this interfere with ham radio?
> >
> >Sounds like a possible nice alternative to BPL :-)
> >
> >Bob
> >k5qwg
> >
>
> Unless we have bad harmonics way up on microwaves, it should not. Looks
like
> NYC already has WiFi distribution, you can see WiFi Hotspot antennas on
the top
> of the public phone booths.
> Yuri, K3BU.us

This would cause US to interfere with the computers.

"Each would be capable of communicating with the wireless networking cards
that now come standard with many computers. "

Isn't this all 802.11 which is up at 2+ GHz and above?

--
Steve N, K,9;d, c. i My email has no u's.

2692. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 16:24:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5igej090egrvgr8441cbnh39jp8pkfptm8@4ax.com>
Source record: 90112

On Thu, 2 Sep 2004 14:27:37 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Incidentally, ground loss is not only smaller in sea water, it is also
>smaller with soil resistivities of several thousand ohms and greater.
>There's a maximum somewhere in between.

Hi George,

The statement above falls into the category of "Old Wives' Tales."
Given the choice for conductors, Sea Water ranks 6 or 7 orders of
magnitude in worse conductivity than any metal (or even carbon) you
would care to pick. By this logic, you should do everything in your
power to operate in an open pit coal mine. ;-)

We won't go into the egregious error of soil resistivity for the same
reasons of senior matriarchal fabrications.

The "legendary" characteristic of Sea Water is found in its far field
reflective characteristic which is remarkable, due largely to its huge
SWR to fields (the same SWR that would occur with the supposed several
thousand ohms of soil). That small boats use a patch on the bottom of
the keel to offer a counterpoise to RF simply exhibits how little
ground development is necessary when the huge asset of reflectivity
dominates this large loss of a poor ground connection (you should also
note the ironic application of "ground" in this regard).

>To crudely estimate ground loss, download program RADIALS2 from website
>below. It's all crammed into only 70 kilo-bytes. Nobody has yet complained
>it gives the wrong answers.

For that matter, no one has even offered it works! Principally
because it places the onus on you proving one of two things:
1. it does work;
2. it does not work.
How can you tell? ;-)

You would stand a better chance with such forecasts using the old
Magic 8-Ball which would at least offer the occasional honest answer
like "Can't answer right now, try again."

Punchinello,

So, old man, tell us when you are going to offer any substantive
method that gives numbers to these illusions of ground you offer? The
soil of your back garden, much less Britain hardly are representative
of a much greater continental expanses beyond that little island you

occupy. The examples of your erroneous generalizations against reality would be instructive if you simply expanded (embarrassingly perhaps) on your kitchen calculations of mud calibration. After all, its been simply YEARS since you offered such suggestions to no obvious Kelvinian payoff.

73's
Richard Clark, KB7QHC

2693. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 16:46:00 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pp11qFna89rU1@uni-berlin.de>
Source record: 90113

"Richard Clark" wrote (clip):
> The "legendary" characteristic of Sea Water is found in its far field
> reflective characteristic which is remarkable, due largely to its huge
> SWR to fields (the same SWR that would occur with the supposed several
> thousand ohms of soil).

How does the statement above reconcile with the fact that groundwave daytime signal strength is far better over a sea water path than any ground path? There is (essentially) no returning skywave signal to reflect during daylight hours.

Observe the daytime field strength contours shown on the link below for WABC radio, for example.

http://www.radio-locator.com/cgi-bin/pat?call=WABC&service=AM&status=L&hours=D

RF

2694. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 16:57:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n0kej0ds1d32lajlj9ik7rdd8rs9buk8k3@4ax.com>
Source record: 90114

On Thu, 2 Sep 2004 11:46:00 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" wrote (clip):
>> The "legendary" characteristic of Sea Water is found in its far field
>> reflective characteristic which is remarkable, due largely to its huge
>> SWR to fields (the same SWR that would occur with the supposed several
>> thousand ohms of soil).
>_____________
>
>How does the statement above reconcile with the fact that groundwave daytime
>signal strength is far better over a sea water path than any ground path?

Hi OM,

Perhaps you should attend the quote above again. For instance, how is
it that statements in agreement require "reconciliation?"

73's
Richard Clark, KB7QHC

2695. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 17:26:39 UTC
From: klf <240dl@jl.com>
Message-ID: <jJIZc.133$PM3.56@newsfe2-gui.ntli.net>
Source record: 90116

Firstly, why do you think it would interfere?

"Bob Miller" <rmiller47@satx.rr.com> wrote in message
news:0m7ej0hebs5pe9v89ssh9ulkv6su5njss2@4ax.com...
> Philadelphia is considering a wireless Internet system that would
> blanket the entire city via hundreds of small transmitters.
>
> See
> http://news.yahoo.com/news?tmpl=story&cid=562&u=/ap/20040901/ap_on_hi_te/wireless_cities
_7&printer=1
>
> Would this interfere with ham radio?
>
> Sounds like a possible nice alternative to BPL :-)
>
> Bob
> k5qwg
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.746 / Virus Database: 498 - Release Date: 31/08/2004

2696. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 18:36:14 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pp7ggFnti4hU1@uni-berlin.de>
Source record: 90117

> >"Richard Clark" wrote (clip posted by R. Fry):
> >> The "legendary" characteristic of Sea Water is found in its far field
> >> reflective characteristic which is remarkable, due largely to its huge
> >> SWR to fields (the same SWR that would occur with the supposed several
> >> thousand ohms of soil).
> >>___________
> >
> >How does the statement above reconcile with the fact that groundwave
daytime
> >signal strength is far better over a sea water path than any ground path?
R. Fry.
>
> Hi OM,
>
> Perhaps you should attend the quote above again. For instance, how is
> it that statements in agreement require "reconciliation?"
>
> 73's
> Richard Clark, KB7QHC

So you are saying that sea water paths provide far better groundwave
propagation than overland paths because sea water a such a good reflector?

RF

2697. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 20:10:33 UTC
From: richardharrison@webtv.net
Message-ID: <18504-41377E39-335@storefull-3256.bay.webtv.net>
Source record: 90118

Richard Clark wrote:
"The legendary characteristic of Sea Water is found in its far field reflective characteristic which is remarkable due largely to its huge SWR to fields---."

Yes, a wave striking the sea finds a high reflection coefficient and ground waves do well too.

I am looking at a broadcast allocation book prepared by Cleveland Institute of Radio Electronics in 1959. Many changes in stations and coverage since then, but the book contains an estimated ground conductivity map for the U.S.A. which probably has changed very little since then.

Coastal Texas is almost as good as it gets when it comes to soil on the map, 30 millimhos per meter. Seawater is not shown on the map but its conductivity is given as 5,000 millimhos per meter or 167 times as good as the best soil. Around New York City, conductivity is shown between 0.5 and 4 millimhos. Surface irregularities caused by structures make additional attenuation.

The conductivities shown on the map are probably good averages as the preparers had the propagation data of thousands of broadcast stations which proved their performance to the FCC to work with.

Terman has a ground constant table on page 808 of his 1955 of his 1955 edition. Sea water is given a conductivity of 45,000 micromhos per cm, or 45 millimhos per cm.

John Cunningham says in "The Complete Broadcast Antenna Handbook: on page 309 that:
"The conductivity of the earth ranges from about 2 millimhos per meter for dry sandy locations to as high as 5 mhos/m for sea water."

I think the figures given above are in reasonable agreement. I haven`t researched the conductivity of carbon, but it is reasonably high being used for motor brushes, battery electrodes, and vacuum tube plates.

Best regards, Richard Harrison, KB5WZI

2698. Cheap yagi articles wa5vjb

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 20:51:39 UTC
From: 9A4QV Adam <aalicaj@pfri.hr>
Message-ID: <ch812vioj1@bagan.srce.hr>
Source record: 90021

Hello,

I am missing some issues of the CQ-VHF magazine, August '98 and February'99.
I am looking for the articles about Kent Britain, WA5VJB Cheap yagis. I have
the rest of Cheap yagi saga but will appreciate if somebody can scan this
articles and mail me in any format, pdf, gif, jpeg.

Thanks in advance,
Adam Alicajic, 9a4qv

adam_alicajic@mailnew.com

2699. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 20:55:07 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ppfksFnnsc6U1@uni-berlin.de>
Source record: 90119

"Richard Harrison" wrote (clip):
>I am looking at a broadcast allocation book prepared
>by Cleveland Institute of Radio Electronics in 1959.
>Many changes in stations and coverage since then,
>but the book contains an estimated ground conductivity
>map for the U.S.A. which probably has changed very little
> since then.

The FCC's version of the US ground conductivity map is available on line at
http://www.fcc.gov/mb/audio/m3/

RF

2700. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 21:00:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cu1fj05i68tqp3f8v7jmtfkaepohf9aejn@4ax.com>
Source record: 90120

On Thu, 2 Sep 2004 13:36:14 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>So you are saying that sea water paths provide far better groundwave
>propagation than overland paths because sea water a such a good reflector?
>
>RF

Hi OM,

What is the contention that is your point?

73's
Richard Clark, KB7QHC

2701. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 21:07:29 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ppgc2Fnnh03U1@uni-berlin.de>
Source record: 90022

"Richard Clark" wrote message
news:cu1fj05i68tqp3f8v7jmtfkaepohf9aejn@4ax.com...
> On Thu, 2 Sep 2004 13:36:14 -0500, "Richard Fry" <rfry@adams.net>
> wrote:
>
> >So you are saying that sea water paths provide far better groundwave
> >propagation than overland paths because sea water a such a good
reflector?
> >
> >RF
>
> Hi OM,
>
> What is the contention that is your point?
>
> 73's
> Richard Clark, KB7QH

That it isn't the reflective nature of sea water that is responsible for its good propagation of groundwave signals. That is due to its conductivity.

RF

2702. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 21:43:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bh2fj01u9dr442fspd0ehqcht33vn687q1@4ax.com>
Source record: 90023

On Thu, 2 Sep 2004 15:10:33 -0500, richardharrison@webtv.net (Richard Harrison) wrote:
>Coastal Texas is almost as good as it gets when it comes to soil on the >map, 30 millimhos per meter. Seawater is not shown on the map but its >conductivity is given as 5,000 millimhos per meter or 167 times as good >as the best soil.

Hi Richard,

If all would review the standard FCC groundwave propagation curves, they would notice that they offer low AM Band signal strengths in terms of "conductivity" and that the differences in strength for the 5,000 millimhos per meter and that of 40 millimhos per meter (125 fold difference) DO NOT achieve the same proportional difference in received signal strength. In fact, the difference is so narrow you could shave with a razor as sharp as it. Even at the high end of the band the difference has to be out 700 miles to show the "conductive" ratio. Of course, over that range of transmission ONLY Sea Water would support that forecast as continental soil varies vastly in smaller spans - hence the reputation of the Sea.

>John Cunningham says in "The Complete Broadcast Antenna Handbook: on >page 309 that:
>"The conductivity of the earth ranges from about 2 millimhos per meter >for dry sandy locations to as high as 5 mhos/m for sea water."

This is the conundrum of conductivity of earth: that there is so much contradiction. You cite coastal Texas, but in distinct contradiction to the dry sandy locations forecasts, pan handle Texas also exhibits just as high conductivities for less water as Corpus Christi which oddly enough easily has twice the sand content as those arid wastelands.

There are a lot of reductionist statements about ground that simply don't exhibit against the claims made for it. Reggie has long claimed to be an authority on the subject, and when push comes to shove for my hints that he offer Kelvinian substance, he complains about the CIA or his insufficient understanding of English. The urchins of Rio would guffaw at that one. I will anticipate Punchinello's Magic 8-Ball answer "try again later," as I am sure the software could do no better. ;-)

And by the way, the kitchen calibration of mud is a common gardener's exercise, why Punchinello cannot or does not recite it is evidence that no one really cares to ask (me or him). His embarrassment would be found in its lack of correlation to RF (there are far more

variables to consider).

73's
Richard Clark, KB7QHC

2703. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 21:44:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5t4fj093i6lpjhquk025vq4eal0af5ics8@4ax.com>
Source record: 90024

On Thu, 2 Sep 2004 16:07:29 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>That it isn't the reflective nature of sea water that is responsible for its
>good propagation of groundwave signals. That is due to its conductivity.

Hi OM,

Then the response is quite simple: you are wrong.

73's
Richard Clark, KB7QHC

2704. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 22:17:00 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ppkeeFnc7b2U1@uni-berlin.de>
Source record: 90025

"Richard Clark" wrote
> If all would review the standard FCC groundwave propagation curves,
> they would notice that they offer low AM Band signal strengths in
> terms of "conductivity" and that the differences in strength for the
> 5,000 millimhos per meter and that of 40 millimhos per meter (125 fold
> difference) DO NOT achieve the same proportional difference in
> received signal strength. In fact, the difference is so narrow you
> could shave with a razor as sharp as it. Even at the high end of the
> band the difference has to be out 700 miles to show the "conductive"
> ratio. Of course, over that range of transmission ONLY Sea Water
> would support that forecast as continental soil varies vastly in
> smaller spans - hence the reputation of the Sea.

For a reality check, here are the approx distances to the 1 mV/m contour for 1kW of radiated power from a 90 degree vertical with a good radial ground system. The values were determined from the FCC's standard curves.

Freq Conductivity/Miles

540 kHz 8/66, 40/124, 5,000/140
1,600 kHz 8/22, 40/56, 5,000/126

The average ground conductivity in the U.S. is fairly low, probably somewhere between 8 and 16 mS/m. The difference in ground wave propagation over such paths is dramatically poorer than over sea water.

It is also clear from the above values how much better the low freq MW broadcast channels perform.

RF

2705. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 22:20:32 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ppkl2FmnjqlU1@uni-berlin.de>
Source record: 90026

"Richard Clark" wrote in message
news:5t4fj093i6lpjhquk025vq4eal0af5ics8@4ax.com...
> On Thu, 2 Sep 2004 16:07:29 -0500, "Richard Fry" <rfry@adams.net>
> wrote:
> >That it isn't the reflective nature of sea water that is responsible for
its
> >good propagation of groundwave signals. That is due to its conductivity.
>
> Hi OM,
>
> Then the response is quite simple: you are wrong.
>
> 73's
> Richard Clark, KB7QHC

Believe as you wish, but you won't have much company...

2706. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 22:49:46 UTC
From: Dog Fart <MyBrainHz@Hotmail.com>
Message-ID: <4137a386@post.usenet.com>
Source record: 90027

**** Post for FREE via your newsreader at post.usenet.com ****

"Bob Miller"
> Philadelphia is considering a wireless Internet system
> that would blanket the entire city via hundreds of small
> transmitters.

Damn communists... ;-)

> Would this interfere with ham radio?

Aren't such "wireless" systems typically on the unlicensed 2.45GHz
'microwave oven' band?

In any case, such a system shouldn't cause any significant out-of-band
interference.

-=-=-=

2707. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 23:38:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cgbfj0dsh9mh6vgc641n44mk49ohqqgdgf@4ax.com>
Source record: 90028

On Thu, 2 Sep 2004 17:17:00 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>It is also clear from the above values how much better the low freq MW
>broadcast channels perform.

Hi OM,

You have a remarkable capacity to find controversy where there is
none.

Again, what is the contention that is your point?

73's
Richard Clark, KB7QHC

2708. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 23:41:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b9bfj0drhu8fi3jjegtsn6ic3385ml4ole@4ax.com>
Source record: 90029

On Thu, 2 Sep 2004 17:20:32 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>Believe as you wish, but you won't have much company...

Hi OM,

Your reaction is the shock of a belief being challenged. ;-)

As for having company? I am not under the illusion that science is a
democracy, much less a madison avenue concept.

73's
Richard Clark, KB7QHC

2709. Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-02 23:58:32 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10jfct9rrnodqfc@corp.supernews.com>
Source record: 90030

Of the software that is available for purchase for a reasonable price
(less than $200):

1. EZNEC 4.0

2. NEC-Win Plus

3. Antenna Model

is there a general consensus of the best of these?

Is it worth paying more for some of the features, e.g., EZNEC/4 for $600?

Are there others that are preferred?

What about free versions of the NEC code?

I am interested in modeling a helically wound antenna and so need a lot
of segments.

Thanks.

Thomas

2710. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 00:07:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u8dfj01q0j8khs1c7lahvop90hhmppso1b@4ax.com>
Source record: 90031

On Thu, 02 Sep 2004 19:58:32 -0400, Thomas <nospam@nospam.com> wrote:
>is there a general consensus of the best of these?

Hi Thomas,

Do a Google Groups search of each of those packages with the search
confined to this group. Count the hits.

73's
Richard Clark, KB7QHC

2711. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 00:24:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jfeeue31bnb3f@corp.supernews.com>
Source record: 90032

Richard Clark wrote:
> On Thu, 2 Sep 2004 14:27:37 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
>
>>Incidentally, ground loss is not only smaller in sea water, it is also
>>smaller with soil resistivities of several thousand ohms and greater.
>>There's a maximum somewhere in between.
>
>
> Hi George,
>
> The statement above falls into the category of "Old Wives' Tales."
> Given the choice for conductors, Sea Water ranks 6 or 7 orders of
> magnitude in worse conductivity than any metal (or even carbon) you
> would care to pick. By this logic, you should do everything in your
> power to operate in an open pit coal mine. ;-)
> . . .

It's not an "old wives' tale" at all.

We have to remember that there are two loss mechanisms involved with antennas. One is the resistance encountered by ground current flowing to one of the feedline terminals in a ground-mounted antenna. This can be reduced to an arbitrarily small value by installing radials. The other is loss incurred when the field strikes the ground and reflects. This second loss is generally negligible for horizontally polarized antennas except at high radiation angles, but is very significant for verticals at low angles. This loss occurs mainly beyond the far edge of most radial fields, so there's usually nothing you can do to reduce the reflection loss except to move the antenna.

Perfectly conducting ground has no loss, and perfectly insulating ground has no loss. When considering ground system loss (resistance encountered by local ground currents), the loss is maximum somewhere in between. Doing some experimental modeling with EZNEC/4 (NEC-4 based), I've found that the maximum loss for a radial ground system in the HF range unfortunately hits somewhere around average soil conductivity. It's not an abrupt maximum -- the loss varies fairly gently with conductivity.

Reflection loss has to be considered a little differently. While the same statement about perfectly conducting and perfectly insulating ground is still true, if you had perfectly insulating ground, radiated power would be lost to useful radiation by penetrating the ground, whether or not it got dissipated as heat. (In reality, it would of

course eventually get dissipated, since no ground is perfectly insulating.) Looking just at the amount of radiation that ends up above the horizon, and neglecting conductive ground current loss, the reflection "loss" does indeed seem to increase monotonically as the ground conductivity decreases.

The ground reflection loss can easily be evaluated with any version of EZNEC, including the demo. Choose a vertical antenna such as example file Vert1.ez, set the ground type to Real/MININEC, wire loss to zero, and the plot type to 3D. There should be no resistive loads in the model. Then look at the Average Gain shown at the bottom of the main window after doing a plot calculation. The deviation from a value of 1 (0 dB) represents the fraction of the applied power that's lost in the ground reflection.

Roy Lewallen, W7EL

2712. SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 00:41:25 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch8ejl$lq1$1@titan.btinternet.com>
Source record: 90033

I couldn't resist the temptation to copy the following messages from the UK newsgroup.

==========

> >The so-called swr meter is no more and no less than a simple RF resistance
> >bridge which is either balanced or unbalanced. Usually the latter.
> >
>
> Reg,
> I know you 'have a thing' about the SWR meter not measuring SWR.
> I have an ohm-meter. It doesn't 'measure' ohms. It actually measures current.
> How many 'meters' actually measure what we say they measure?
> Speedometer?
> Flow-meter?
> Odometer?
> Kill-ommeter? (as pronounced by thickies - ugh!)
> Methinks thou splitteth hairs.
> Ian.

==========

The current which is 'measured' by an ohmeter actually exists.

Yet another reason why the so-called swr meter does not measure swr is because there is no transmission line (between meter and transmitter) on which to measure it. SWR on it cannot not exist.

Ian, without wishing to cause the slightest offence, I'm afraid your long, ingrained, aquaintance with the old-wives' tales surrounding swr meters is preventing you (and others) from seeing things from a different point of view.

The instrument is just a 4-arm RF resistance bridge, the arm subject to variation being the input impedance of the transmission line to the antenna which can be any Zo you like. The other 3 arms are fixed.

The 'meter' merely indicates whether or not the input impedance of the line-to-the-antenna is some special value of ohms (usually 50) because that is the desired transmitter load.

It won't, and cannot even, tell you what the value of that special value actually is except under the very exceptional condition that it is exactly correct.

And it tells you absolutely nothing else about what exists or is going on in the station unless you deduce and add to it what you already know by other means anyway.

My objection to current practice arises because the invalid name of the instrument, plus all the arguments which arise in futile attempts to justify it, cause nothing but emotional confusion amongst novices and old-wives alike.

So why not just change the name to TLI (Transmitter Loading Indicator) and all the confusion and arguments will cease. Novices will no longer have to be re-educated about the true meaning and relevance of swr.

Or YOU can choose a new name if you wish and take the credit for it.

No circuit changes are needed. ;o)

Regards, Reg, G4FGQ

2713. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 00:59:48 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <i7gfj01vv7lco6g3oi8ebhfvc4a93mpl40@4ax.com>
Source record: 90034

On Fri, 3 Sep 2004 00:41:25 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote a wandering communiquï¿½, shortened
to its essence:

|So why not just change the name to TLI (Transmitter Loading Indicator)

Maybe because that description is even more arcane than SWR meter?

2714. Re: Cheap yagi articles wa5vjb

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 01:39:36 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <4lifj09bt2cjlsfglos895khdk9jbq6i15@4ax.com>
Source record: 90035

On Thu, 2 Sep 2004 22:51:39 +0200, "9A4QV Adam" <aalicaj@pfri.hr>
wrote:

>Hello,
>
>I am missing some issues of the CQ-VHF magazine, August '98 and February'99.
>I am looking for the articles about Kent Britain, WA5VJB Cheap yagis. I have
>the rest of Cheap yagi saga but will appreciate if somebody can scan this
>articles and mail me in any format, pdf, gif, jpeg.
>
>Thanks in advance,
>Adam Alicajic, 9a4qv
>
>adam_alicajic@mailnew.com
>
>
Adam,
I don't have the articles, though I do remember them. However, the
site below shows the same antennas as I recall in the article and may
be of use to you. The site is authored by Kent Brtain, shows pictures,
has tables showing dimensions from 2 meters to 1.2 gig and may even
have more info than was in the articles.
http://www.clarc.org/Articles/uhf.htm

Good Luck & 73,
Howard KE6MAK

2715. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 02:28:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4137d857$1_2@corp.newsgroups.com>
Source record: 90036

Reg Edwards wrote:
> Yet another reason why the so-called swr meter does not measure swr is
> because there is no transmission line (between meter and transmitter) on
> which to measure it. SWR on it cannot not exist.

The consensus of opinion over on science.physics.electromag is
that a two foot long section of 50 ohm coax is all the length
needed to force the V/I ratio to be 50 ohms at HF - something
to do with the length Vs separation between conductors ratio.
That V/I ratio = 50 is the assumption made by the SWR meter
designer when the meter is calibrated.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2716. twinlead question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 03:47:07 UTC
From: pdrunen@aol.com
Message-ID: <20040902234707.08241.00000029@mb-m10.aol.com>
Source record: 90037

Hi again Group,

Thanks again for the help with the other questions I have posted on the board.

Does anyone know the hurricane net frequency? Next few days should be interesting for me, I am near Pensacola so I may not see as much action.

For my question on twinlead, most folks now use the 300:75 ohm balun at the TV antenna and drive coax down to the TV set. Has any one measured the impedance at the set with the MFJ-269 or equal over the range of TV channel 2 to 13? and 14 to 69?

I recall working for a TV service man back in the 80's (I was a ham teen). He would put a twist on the feeder as he brough it down the pole and used 6 inch standoffs to keep the line from getting near the metal pole and to keep it straight. He used only RCA antenna's and gave me my first digital VOM for my birthday. I still have it today. I believe he enjoyed having a techie teen around who enjoyed the concept of the ether.

Could we get away from the above by placing a metal shield around the twin-lead or would this effect the impedance of the twin-lead? My goal is a folded dipole and use the 300 ohm twin-lead with an outer shield to keep coupling from metal out of the equation.

Well, all for now.

73's from KJ4UO.....

2717. Re: twinlead question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 03:57:16 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <xYRZc.141273$Lj.111924@fed1read03>
Source record: 90038

"PDRUNEN" <pdrunen@aol.com> wrote

> Hi again Group,
>
> Thanks again for the help with the other questions I have posted on the board.
>
> Does anyone know the hurricane net frequency? Next few days should be
> interesting for me, I am near Pensacola so I may not see as much action.

You most certainly will see some action, if Hurricane Frances follows the current forecast track and comes right across the Florida Panhandle! HWN is 14.325.0 USB. Not very active after 0100-0200z. Other freqs put out there today were 7.247, corrected to 7.242, did not seem to know what they were talking about there, and 3.950, both presumably LSB. 3.950 LSB is active now.

Someone else will have to help on your question about vhf-2 to vhf-13 impedance. The only time I receive broadcast tv is during hurricanes when the cable is out. You might be there soon, I'm thnking. Good luck and stay safe.

Jack
Virginia Beach

>
> For my question on twinlead, most folks now use the 300:75 ohm balun at the TV
> antenna and drive coax down to the TV set. Has any one measured the impedance
> at the set with the MFJ-269 or equal over the range of TV channel 2 to 13? and
> 14 to 69?
>
> I recall working for a TV service man back in the 80's (I was a ham teen). He
> would put a twist on the feeder as he brough it down the pole and used 6 inch
> standoffs to keep the line from getting near the metal pole and to keep it
> straight. He used only RCA antenna's and gave me my first digital VOM for my
> birthday. I still have it today. I believe he enjoyed having a techie teen
> around who enjoyed the concept of the ether.
>
> Could we get away from the above by placing a metal shield around the

twin-lead
> or would this effect the impedance of the twin-lead? My goal is a folded
> dipole and use the 300 ohm twin-lead with an outer shield to keep coupling
from
> metal out of the equation.
>
> Well, all for now.
>
> 73's from KJ4UO.....

2718. Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 04:28:05 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040903002805.25434.00000024@mb-m04.aol.com>
Source record: 90039

I have an offer to purchase some used hardline from a cell phone system. Is it suitable for use on 2m? Can it be run over a shingle roof or does it need standoffs? What is a good price for 100 feet with N Connectors?

Here is the email that I received.

It is previously used and not new. If you feel it is worth somthing to you, make up a price. I will see if I can find a another N-Female connector to go on the other end. Posibly another N-Female for the open end. Most of the Hard Line is from Cell Phone towers that are getting up graded to a new lower loss feed line. Cell Swept Hard Line is more expensive than standard run of the mill. Some Pieces have a ground wire on them and a strain relif for hoisting up the tower (Finger Pusle grip lock).

Randy ka4nma
theplanters95 at aol.com

2719. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 04:33:27 UTC
From: Ray Anderson <reanderson@sbcglobal.net>
Message-ID: <ruSZc.15231$tl4.12587@newssvr29.news.prodigy.com>
Source record: 90040

Thomas wrote:

>
> What about free versions of the NEC code?
>
> I am interested in modeling a helically wound antenna and so need a lot
> of segments.
>
> Thanks.
>
> Thomas

For free packages, I find the 4nec2 program amongst the most powerful
and easy to use. You can download it from the NEC Archives at
http://www.qsl.net/wb6tpu/swindex.html

It has most, if not all, of the features of many of the commercial
packages plus a few that they don't have. I believe the NEC2 engine
underlying the gui is set up to handle up to 11,000 segments.

-Ray WB6TPU

2720. Re: Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 04:39:52 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <tASZc.141301$Lj.133601@fed1read03>
Source record: 90041

"Theplanters95" <theplanters95@aol.comnospam> wrote

> I have an offer to purchase some used hardline from a cell phone system.
Is it
> suitable for use on 2m? Can it be run over a shingle roof or does it need
> standoffs? What is a good price for 100 feet with N Connectors?

Recommend never buying used feedline, for any reason. If it's free, and you
don't find it perforated a million places from lightning, give it a try.
Otherwise the most it's worth is it's scrap value in copper, less the cost
of stripping the dialectric, shield and covering.

Jack

2721. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 08:36:37 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch9ael$j55$1@hercules.btinternet.com>
Source record: 90042

> Reg Edwards wrote:
> > Yet another reason why the so-called swr meter does not measure swr is
> > because there is no transmission line (between meter and transmitter) on
> > which to measure it. SWR on it cannot not exist.
>
> The consensus of opinion over on science.physics.electromag is
> that a two foot long section of 50 ohm coax is all the length
> needed to force the V/I ratio to be 50 ohms at HF - something
> to do with the length Vs separation between conductors ratio.
> That V/I ratio = 50 is the assumption made by the SWR meter
> designer when the meter is calibrated.
> --
> 73, Cecil

==========

Cec, I've never before heard such a loony notion.

Your science.physics.elecromag correspondent invented the idea specially for you and was amusing himself by pulling your leg. And now you're trying to pull mine.

Reg, G4FGQ

2722. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 11:24:32 UTC
From: deryck lant <deryck@deryck.com>
Message-ID: <2004090312243270814@deryck.com>
Source record: 90043

The message <ruSZc.15231$tI4.12587@newssvr29.news.prodigy.com>
from Ray Anderson <reanderson@sbcglobal.net> contains these words:

> Thomas wrote:

> >
> > What about free versions of the NEC code?
> >
> > I am interested in modeling a helically wound antenna and so need a lot
> > of segments.
> >
> > Thanks.
> >
> > Thomas

> For free packages, I find the 4nec2 program amongst the most powerful
> and easy to use. You can download it from the NEC Archives at
> http://www.qsl.net/wb6tpu/swindex.html

> It has most, if not all, of the features of many of the commercial
> packages plus a few that they don't have. I believe the NEC2 engine
> underlying the gui is set up to handle up to 11,000 segments.

> -Ray WB6TPU

Can confirm all that Ray says. 4nec2 is an outstanding program that is
constantly having new features added. The 3-D viewer is spectacular and
generates 21 shades of colour denoting gain in dBi superimposed over
antenna structure. Rotates in 3 dimentions.

Has Optimizer for SWR, Gain, F/B, F/R, input resistance and input reactance.

You can specify insulated wire. Arie supplies 25 different coatings.

Has standard .nec input and output file format so unlimited amount of
antenna designs can be studied. Entry level commercial programs have each
their own unique file format so tying you into their system.

Has Geometry Builder so if you wish you can graphically input your new
antenna.

And as Ray said 11,000 segments and patches.

Much, much more.

Download 4nec2X and you will get the realtime 3D viewer.

Arie is to be congratulated on making his program freely available.

Deryck G0KOR

2723. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 11:36:32 UTC
From: White Lable <NoSpam@Hotmail.com>
Message-ID: <4138573b@post.usenet.com>
Source record: 90044

**** Post for FREE via your newsreader at post.usenet.com ****

"Cecil Moore"
> ...a two foot long section of 50 ohm coax
> is all the length needed to force the V/I ratio
> to be 50 ohms at HF...

Of course, this is only true (in the practical sense) for that brief interval until any reflections arrive back at the point where the measurements are being made and all hell breaks loose. It is very obviously all tied into the meaning of 'characteristic impedance' - there's no mystery here.

Semantics.

There is often miscommunication(*) about the distinction between the initial period (before the reflections arrive) and the steady state mess that arises further along the time axis.

*These can be easily identified - even defined - as any thread that includes more than about 20 postings by Cecil. ;-)

-=-=-=

2724. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 12:50:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pr7jgFo7h7lU1@uni-berlin.de>
Source record: 90045

"Reg Edwards" wrote (clips):
> Yet another reason why the so-called swr meter does not
>measure swr is because there is no transmission line
>(between meter and transmitter) on which to measure it.
>SWR on it cannot not exist.

The indication displayed by that meter is the result of the match of the transmission line and antenna connected to the output of the transmitter to the value for which the meter was designed and calibrated. Certainly it is possible for SWR to exist in this RF system in normal use, and the meter measures its value.

> My objection to current practice arises because the invalid
>name of the instrument, plus all the arguments which arise
>in futile attempts to justify it, cause nothing but emotional
>confusion amongst novices and old-wives alike.

The generic function of this meter is to measure the degree of match between a source and a load. It is not a direct measure of SWR. When properly designed, it is a measure and comparison of voltages developed by the incident and reflected power in the system as they pass a sample point.

There may not be enough transmission line in the RF system for the standing wave pattern itself to develop on it fully. It doesn't matter. The ratio of forward to reflected power in the system will be the same as if there WAS enough line, and that is what the meter measures.

The meter could be calibrated in units of return loss, reflection coefficient, or SWR -- all of which have corresponding equivalents. A return loss of 26.45 dB = 4.76% reflection coefficient = 1.1:1 SWR, for example.

The historical convention for this meter is to calibrate its display in units of SWR. Or the meter scale could just have three zones: Good - ? - Bad, which would do away with all these troublesome technical terms and the objections they elicit from some (nudge, nudge). No offense.

RF

> Ian, without wishing to cause the slightest offence, I'm afraid your long,
> ingrained, aquaintance with the old-wives' tales surrounding swr meters is
> preventing you (and others) from seeing things from a different point of
> view.
>
> The instrument is just a 4-arm RF resistance bridge, the arm subject to
> variation being the input impedance of the transmission line to the
antenna

> which can be any Zo you like. The other 3 arms are fixed.
>
> The 'meter' merely indicates whether or not the input impedance of the
> line-to-the-antenna is some special value of ohms (usually 50) because
that
> is the desired transmitter load.
>
> It won't, and cannot even, tell you what the value of that special value
> actually is except under the very exceptional condition that it is exactly
> correct.
>
> And it tells you absolutely nothing else about what exists or is going on
in
> the station unless you deduce and add to it what you already know by other
> means anyway.
>
> My objection to current practice arises because the invalid name of the
> instrument, plus all the arguments which arise in futile attempts to
justify
> it, cause nothing but emotional confusion amongst novices and old-wives
> alike.
>
> So why not just change the name to TLI (Transmitter Loading Indicator) and
> all the confusion and arguments will cease. Novices will no longer have to
> be re-educated about the true meaning and relevance of swr.
>
> Or YOU can choose a new name if you wish and take the credit for it.
>
> No circuit changes are needed. ;o)
> ---
> Regards, Reg, G4FGQ
>
>

2725. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 13:13:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41386f7e_1@corp.newsgroups.com>
Source record: 90046

Reg Edwards wrote:

>W5DXP wrote:
>>The consensus of opinion over on science.physics.electromag is
>>that a two foot long section of 50 ohm coax is all the length
>>needed to force the V/I ratio to be 50 ohms at HF - something
>>to do with the length Vs separation between conductors ratio.
>>That V/I ratio = 50 is the assumption made by the SWR meter
>>designer when the meter is calibrated.

> Your science.physics.elecromag correspondent invented the idea specially for
> you and was amusing himself by pulling your leg. And now you're trying to
> pull mine.

OK, Reg, when the conductors are 1/4 inch apart, what length
of coax is necessary for the Z0 of the coax to effect the
ratio of E-field to H-field? Those pretty smart guys over
on s.p.e say a ratio of 100:1 length/separation is plenty
enough to force the V/I ratio to be 50 ohms.

We can actually measure the V/I ratio at the input to the
SWR meter. I'll bet, when a properly calibrated 50 ohm SWR
meter is reading zero reflected power, that the V/I ratio
is indeed 50 ohms.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2726. Re: Htx-100 Mic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 13:57:23 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <7L_Zc.2012$lv3.189864@news4.srv.hcvlny.cv.net>
Source record: 90047

Fear not, I have it and will send the mic off ASAP. Take care and enjoy. :-)

--
73 de Bert
WA2SI

"Richard" <reve6gte@telus.net> wrote in message
news:l7wZc.58821$jZ5.3969@clgrps13...
> HI Bert.
> Hope all is well es hpe u received my shipping Address.
>
>
> "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> news:nrMYc.26105$Es2.9327842@news4.srv.hcvlny.cv.net...
> > My mistake, but fear not. I thought you meant the HTX-10. However, my
> mobile
> > was a Presiden HR-2510/Lincoln. (AM/FM/LSB/USB/CW version of the
HTX-100)
> I
> > also have the stock mic for that as well.
> >
> > I sent you an e-mail and will ship the mic to your supplied shipping
> > address. Take care es vy...
> >
> > --
> > 73 de Bert
> > WA2SI
> >
> > "Richard" <reve6gte@telus.net> wrote in message
> > news:GlMYc.56138$jZ5.40429@clgrps13...
> > > "Bert" ..The HTX-100 is not a phone only rig it does CW as well ....
73
> > > VE6GTE
> > > "Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
> > > news:s_tYc.11684$Es2.6250346@news4.srv.hcvlny.cv.net...
> > > > I have an extra and would be glad to send it to you, free of charge,
> > > > Richard. It's brand new too, just say the word.
> > > >
> > > > The rig was given to me as a gift and the generous giver had no way
of
> > > > knowing that he was giving a phone-only rig to a CW addict. ;-)
> > > >
> > > > --
> > > > 73 de Bert
> > > > WA2SI

> > > > "Richard" <reve6gte@telus.net> wrote in message
> > > > news:YD9Yc.54028$S55.37744@clgrps12...
> > > > > I have a Radio Shack model HTX-100 Ten meter transceiver, brand
new
> > and
> > > > > have
> > > > > never been used, still in the box. The problem is that I do not
have
> a
> > > > > microphne for
> > > > > it and would like to know what other mic could be wired for this
> > radio.
> > > > > Pin input is a 8 pin connecter, would any up and down button mic
> work.
> > > > > After searching the net I have learned that the mic for this rig
has
> > two
> > > > > buttons on it
> > > > > For searching the memory channels, up or down.
> > > > > Please help ..... Richard.
> > > > >
> > > > >
> > > >
> > > >
> > >
> > >
> >
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>

2727. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 14:14:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ch9u91$g1g$1@titan.btinternet.com>
Source record: 90048

Richard Fry wrote -
> The generic function of this meter is to measure the degree of match
between
> a source and a load.

Exactly! So let's call it a TLI. Which is what it actually is. Abolish
the source of confusion and the arguments on what it does.

Of what use is the swr to anybody anyway, even when you think you know what
it is? What do you do with it? What does it tell you that you don't
already know?

Reg

2728. Re: Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 14:54:35 UTC
From: fractenna@aol.com
Message-ID: <20040903105435.04811.00003201@mb-m24.aol.com>
Source record: 90049

>
>"Theplanters95" <theplanters95@aol.comnospam> wrote
>
>> I have an offer to purchase some used hardline from a cell phone system.
>Is it
>> suitable for use on 2m? Can it be run over a shingle roof or does it need
>> standoffs? What is a good price for 100 feet with N Connectors?
>
>Recommend never buying used feedline, for any reason. If it's free, and you
>don't find it perforated a million places from lightning, give it a try.
>Otherwise the most it's worth is it's scrap value in copper, less the cost
>of stripping the dialectric, shield and covering.
>
>Jack
>

Unless it has succumbed to water damage or lightning, you should have no problem with it. The insertion loss will be very low on 2M compared to other (new) options at the same price.

I use both new and used cable, and it is very rare that I find a piece of used hardline that has unacceptable insertion loss.

Usually the problems arise at the connector, rather than the (hardline) cable length itself.

73,
Chip N1IR

2729. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 15:29:21 UTC
From: richardharrison@webtv.net
Message-ID: <29127-41388DD1-147@storefull-3252.bay.webtv.net>
Source record: 90050

Cecil, W5DXP wrote:
"---a two foot long section of 50 ohm coax is all the length needed to force the V/I ratio to be 50 ohms at HF---"

At 3 MHz?

When power is applied to a transmission line, energy from the power source doesn`t appear everywhere along the line at once. Instead, energy travels away from the source in the form of an EM wave called the "incident wave" arriving at various spots along the line in order and at sequential times.The time it takes to travel through each line segment depends on the four properties of the line, series resistance (R), series inductance (L), shunt capacitance (C), and shunt conductance (G).

Source current will start charging the shunt capacitance of the first line segment. It is delayed by the series inductance and resistance of the first segment. Resistance does not directly delay current, but limits current to the capacitace. As the shunt capacitance is charged, the charging current tapers, but the next line segment starts charging through its series inductance and resisitance. This energy travel process continues sequentially throughout the line.

The value of current in an infinite line is the line voltage divided by the line`s Zo. In a line with reflection, the current in each direction is the voltage motivating the current in thet direction divided by Zo.

Just how short can a transmission line be and still enforce its Zo? A 1/4-wave matching section inverts impedance between its ends by enforcing its Zo.

For Zo to equal the square root of L/C, (a resistance), XL must be much greater than R, and XC must be much greater than G. These restrictions impose frequency limits on Zo. And, these restrictions may place a low frequency limit on how short a line can be and still enforce Zo.

Best regards, Richard Harrison, KB5WZI

2730. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 15:43:32 UTC
From: richardharrison@webtv.net
Message-ID: <29126-41389124-451@storefull-3252.bay.webtv.net>
Source record: 90052

Richard Fry wrote:
"Or the meter scale could just have three zones: Good - ? - Bad,---."

As I recall, such a meter display used to be called an "English Scale".
This may appeal to Reg.

Best regards, Richard Harrison, KB5WZI

2731. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 15:50:43 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <xF0MRfETLJOBFw5p@g3ohx.demon.co.uk>
Source record: 90051

In message <ch9u91$g1g$1@titan.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> writes
>Richard Fry wrote -
>> The generic function of this meter is to measure the degree of match
>between
>> a source and a load.
>
>----------
>
>Exactly! So let's call it a TLI. Which is what it actually is. Abolish
>the source of confusion and the arguments on what it does.
>
>Of what use is the swr to anybody anyway, even when you think you know what
>it is? What do you do with it? What does it tell you that you don't
>already know?
>---
>Reg
>
>

Call it an RLR meter, which is what it IS really measuring.
Ian.
--

2732. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 15:57:55 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2prik5FoakeqU1@uni-berlin.de>
Source record: 90053

"Reg Edwards" wrote:
>Of what use is the swr to anybody anyway, even when
>you think you know what it is? What do you do with it?

You strive to minimize it.

>What does it tell you that you don't already know?

You won't know anything about the degree of match between a source and its load without a means of measuring it. It doesn't matter whether we state the result of the measurement in units of SWR, return loss or as a reflection coefficient -- they all give the same information, and allow the same action to be taken as a result.

To be accurate and valid, none of these units requires measurements to be taken with some discrete length of transmission line between the source and the load -- including SWR.

RF

2733. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 16:14:43 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2prjjlFo4nftU1@uni-berlin.de>
Source record: 90054

"Richard Harrison" <richardharrison@webtv.net> wrote
> Cecil, W5DXP wrote:
> "---a two foot long section of 50 ohm coax is all the length needed to
> force the V/I ratio to be 50 ohms at HF---"
>
> At 3 MHz?
>
> When power is applied to a transmission line, energy from the power
> source doesn`t appear everywhere along the line at once.
(much clippage)
> Just how short can a transmission line be and still enforce its Zo? A
> 1/4-wave matching section inverts impedance between its ends by
> enforcing its Zo.
> For Zo to equal the square root of L/C, (a resistance), XL must be much
> greater than R, and XC must be much greater than G. These restrictions
> impose frequency limits on Zo. And, these restrictions may place a low
> frequency limit on how short a line can be and still enforce Zo.

For a concept of what that length actually is in the real world, recall that Bird Corp and others supply directional wattmeters giving reasonably accurate measurement of forward and reflected power -- leading to an SWR value. The coax sampling sections for RF frequencies at least as low as 540 kHz. is around 9" in length.

RF

2734. Re: Microphone help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 16:59:24 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <Mp1_c.5347$683.763821@twister.southeast.rr.com>
Source record: 90055

"Jimmie" <Gfender@carolina.rr.com> wrote in message
news:aInZc.5342$MO3.343132@twister.southeast.rr.com...
> I have an IC-229H 2M radio that I am using with a HM 56a microphone. The
> radio keys as soon as I turn it on with the microphone connected. First is
> this the right mike to use with this radio. Been a few years since I last
> used it. The connector has been resoldered but I think I did this to fix a
> broken wire. Wiring diagram with wire colors, pin numbers would be most
> helpful.Really think it is the right mike and dont really think it is
wired
> wrong but both are possibilities, Any other help would also be
appreciated.
>
> Jimmie
> kd4rqe
>
>
Does the "MICE" connection on an Icom radio suppose to go to the shield on
the microphone. That is the way my microphone is wired. I would have thought
the shield is suppose to go to ground. Maybe MICE means mic earth.

2735. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 17:02:16 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2prmcqFnvht6U1@uni-berlin.de>
Source record: 90056

"Reg Edwards" wrote

>let's call it a TLI. Which is what it actually is. Abolish
> the source of confusion and the arguments on what it does.

Afterthought... if you call it a TLI, is that really less confusing? The term "Transmitter Loading Indicator" could apply to a way to display the amount of power at the tx output terminals, and show nothing of the quality of the load that is dissipating that power (e.g., the degree of match between the source and the load).

RF

2736. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 17:19:26 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <yl1_c.5356$683.765208@twister.southeast.rr.com>
Source record: 90057

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ch60jbsbk1@hercules.btinternet.com...
> I should have mentioned. When measuring signal strengths as a measure of
> performance there's safety in numbers. Take the average of a fair number
of
> transmissions, all well above the noise level, at about the same time each
> day, using your most stable S-meter with the receiver gain turned down
such
> that the meter deflection is on the most sensitive sector of its scale.
> Allow the receiver to warm up for the same length of time on each occasion
> it is used.
>
> S-meter calibration doesn't matter two hoots.
>
> And once set, don't ever touch the receiver gain control.
>
> You should take all these precautions from the time when you have laid
only
> one radial. You will not wish to dig up already laid radials in order to
> re-measure the earlier ones you forgot to treat in the standard manner.
>
> It will be appreciated, to make tests during radial-laying operations by
> asking for signal strength reports from your many friends, using THEIR
> S-meters, will result in you losing them.
>
> Incidentally, when "I" used this method of testing antenna efficiency I
> stopped at 8, 10 feet, radials with a 3 feet rod at the end of each. This
> included the domestic incoming main water pipe which made no difference
when
> THAT was connected. So I stopped.
>
> But my soil resistivity is only about 70 ohm-metres. I can grow anything
in
> my garden. At present it is covered with a dense growth of 3 feet high
> weeds except for a small patch which I use to feed the birds. As if they
> didn't get enough to eat anyhow. With the trees and overgrown bushes it
is
> a wild-life sanctuary for frogs, rats, squirrels and hedgehogs. The only
> complaints I get are from the neighbours. But its stopped them
complaining
> about TVI.
> ---
> Reg, G4FGQ
>

>
Sounds a little like my counterpoise. 12 wires 12ft long, Short ground rod at far end of each wire just to pin it down. 10ft 2inch pipe in the middle for ground/ mount. You can get an idea of resistance to ground by connecting 120 VAC to the ground system through a fuse and see how big of a fuse you can blow. I rigged a fuse holder with a neon blown fuse indicator to a piece of PVC pipe. last time I checked mine it would pop a 10amp fuse.

2737. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 17:35:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jharfgjg4m829@corp.supernews.com>
Source record: 90058

Reg,

I'm afraid you're wasting your time trying to convince mere amateurs with your carefully reasoned and flawless logic.

Instead, I suggest you concentrate your efforts on the true professionals out there. Surely, they'll immediately see the wisdom of your arguments and change their careless ways.

I'm talking of course about the engineers in such unenlightened companies as HP/Agilent, Narda, Tektronix, Wiltron/Anritsu, and their colleagues and competitors in the U.K. They're constantly making the same egregious error, by specifying the SWR of terminating resistors, connectors, test equipment device inputs, and even (gasp) outputs.

Once the professionals change their ways, amateurs, copycats as they are, will surely follow.

Good luck with your quest!

Roy Lewallen, W7EL

2738. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 17:43:25 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <vJ9X$al90KOBFAau@ifwtech.co.uk>
Source record: 90059

"SWR" has two different definitions, and Cecil is switching between them with his usual facility.

Definition 1: the ratio of maximum to minimum voltage on a transmission line. To measure that, you obviously need a significant length of transmission line "for the wave to stand on" - depending on there the maximum and minimum are, you could need anything between an electrical quarter-wave or an electrical half-wave to locate both points with certainty.

Cecil wrote:
>
>The consensus of opinion over on science.physics.electromag is
>that a two foot long section of 50 ohm coax is all the length
>needed to force the V/I ratio to be 50 ohms at HF - something
>to do with the length Vs separation between conductors ratio.

This is a side-issue, not relevant to the main discussion. I'm not sure whether that distance should be in units of wavelengths, line diameters or a function of both - but definitely not a simple length in feet or metres. However, the line length required for the V/I ratio to come very close to its characteristic value is certainly a lot less than the length required to measure an SWR under Definition 1, so it's a completely separate side-issue.

Cecil again:
>That V/I ratio = 50 is the assumption made by the SWR meter
>designer when the meter is calibrated.

That *is* relevant - but it's relevant to a different definition of SWR!

Definition 2: a mathematical function indicating how closely a given impedance is matched to a given system reference impedance.

Under definition 2, you can measure SWR at a single point in the line. The "given impedance" whose SWR you are measuring is the impedance connected to the Output (or "Antenna", or "Load") side of the meter. If 50 ohms is the chosen system reference impedance, then the SWR meter is designed, built and calibrated to indicate SWR=1 when it's terminated in an accurate load of that impedance.

Everybody lives very comfortably with those two definitions of "SWR" that exist side by side.

And that includes Reg - he understands transmission lines inside-out, and two definitions of "SWR" don't trouble him in the slightest.

What Reg can't live with is that uncontrollable itch to make people jump through hoops.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2739. Re: Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 18:52:20 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <E33_c.111425$Fg5.56948@attbi_s53>
Source record: 90060

"Theplanters95" <theplanters95@aol.comnospam> wrote in message
news:20040903002805.25434.00000024@mb-m04.aol.com...
>I have an offer to purchase some used hardline from a cell phone system.
>Is it
> suitable for use on 2m? Can it be run over a shingle roof or does it need
> standoffs? What is a good price for 100 feet with N Connectors?
>
> Here is the email that I received.
>
> It is previously used and not new. If you feel it is worth somthing
> to you, make up a price. I will see if I can find a another N-Female
> connector to go on the other end. Posibly another N-Female for the open
> end. Most of the Hard Line is from Cell Phone towers that are getting up
> graded to a new lower loss feed line. Cell Swept Hard Line is more
> expensive than standard run of the mill. Some Pieces have a ground wire
> on
> them and a strain relif for hoisting up the tower (Finger Pusle grip
> lock).
>
> Randy ka4nma
> theplanters95 at aol.com
>

Randy,

It can not hurt to look at the feedline - it would be a good idea to find
out the size you are dealing with 1/2" ; 3/4"; 7/8"; 1" etc.
The traditional cellular (AMPS) frequency allocation is 800 MHz - 900 MHz.

The Personal Communications Service or PCS -- which is at 1.8 - 2.0 GHz was
established by the FCC
in 1984, with auctions of the spectrum in 1985. Each auction allowed 2 or 3
primary bidders for spectrum for each major
geographical area of the US. Sprint Spectrum (now known as Sprint PCS)
acquired primary allocations for 95% of these
areas.

gb

2740. Re: Cheap yagi articles wa5vjb

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 19:25:49 UTC
From: 9A4QV Adam <aalicaj@pfri.hr>
Message-ID: <chage0eir1@bagan.srce.hr>
Source record: 90062

Thanks for the link Howard. I already check this web pages together with other regarding the Cheap yagis. In the e-mail exchange with the author Kent we found out that some details, dimension are not right on the web, i check personally and found some errors on the 70cm band antennas, length of the elements.
Just because of that i prefere to have printed articles if possible.

73, Adam, 9a4qv

"Howard" <mensch90249@yahoo.com> wrote in message news:4lifj09bt2cjlsfglos895khdk9jbq6i15@4ax.com...
> On Thu, 2 Sep 2004 22:51:39 +0200, "9A4QV Adam" <aalicaj@pfri.hr>
> wrote:
>
> >Hello,
> >
> >I am missing some issues of the CQ-VHF magazine, August '98 and February'99.
> >I am looking for the articles about Kent Britain, WA5VJB Cheap yagis. I have
> >the rest of Cheap yagi saga but will appreciate if somebody can scan this
> >articles and mail me in any format, pdf, gif, jpeg.
> >
> >Thanks in advance,
> >Adam Alicajic, 9a4qv
> >
> >adam_alicajic@mailnew.com
> >
> >
> Adam,
> I don't have the articles, though I do remember them. However, the
> site below shows the same antennas as I recall in the article and may
> be of use to you. The site is authored by Kent Brtain, shows pictures,
> has tables showing dimensions from 2 meters to 1.2 gig and may even
> have more info than was in the articles.
> http://www.clarc.org/Articles/uhf.htm
>
> Good Luck & 73,
> Howard KE6MAK

2741. Mag Mount ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 19:31:47 UTC
From: Richard <reve6gte@telus.net>
Message-ID: <DE3_c.65041$jZ5.37817@clgrps13>
Source record: 90061

I have magnet mount ant model number CS-28M
It is a 10 meter antenna but I do not know what the
power handling capability is for this antenna.
On the bottom section of the antenna obove the magnet mount is printed on a
sticker..... CS-28M Signals
Can any one tell me if this antenna can handle at
100 Watts.
Richard.

2742. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 19:49:52 UTC
From: richardharrison@webtv.net
Message-ID: <18504-4138CAE0-482@storefull-3256.bay.webtv.net>
Source record: 90063

Richard Fry wrote:
"For a concept of what that length actually is in the real world, recall that Bird Corp. and others supply directional wattmeters giving reasonably accurate measurement of forward and reflected power -- leading to SWR value."

True, and these work with mismatched loads if you have enough 50-ohm cable connecting the wattmeter.

The Bird Model 43 wattmeter is 5.125 inches (13 cm) wide. This is the distance between its input and output connectors. This length of "high precision 50 ohm coaxial air line designed for insertion between the transmitter or load" requires either some more 50-ohm line or a matched load to enforce Zo.

IF you were to insert the Model 43 into most 75-ohm transmission systems, the precision 50-ohm meter line of 5.125 inches would not likely enforce the 50-ohm V/I ratio and the meter reading would be in error. At VHF, 1/2-wave of connecting line including the Model 43 wattmeter is ideal, allowing you to insert and withdraw the meter without affecting the match.

Best regards, Richard Harrison, KB5WZI

2743. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 19:54:50 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <chaib0$4m5$1@newshost.mot.com>
Source record: 90066

Somebody said, I can't tell who (or is that whom?):
> > Reg,
> > I know you 'have a thing' about the SWR meter not measuring SWR.
> > I have an ohm-meter. It doesn't 'measure' ohms. It actually measures
> > current.
> > How many 'meters' actually measure what we say they measure?
> > Speedometer?

So these used to measure magnetic drag on a conducting cup of a transmission output monitoring rotary cable and therefore should be called a Mdoaccoatomrc-o-meter

> > Flow-meter?

Lets see. One versions I am familiar with measures the number of free balls passing a given point in a circulary disposed tube while following the movement of a liquid and therefore is a:
Fbpagpiacdt-o-meter, I guess..

> > Odometer?
And this turky measures the revolutions of the first thingy.

> > Kill-ommeter? (as pronounced by thickies - ugh!)

Don't you mean Kill-o-meter?

Woops! Does anyone sell these meters???

Besides we say cent-a-meter

And... and... an ohm-meter is really an "incorrectly calibrated am-meter", as is a volt-meter. Then is an am-meter a "magnetic field produced by a coil", or an MFPBAC-o-meter ???

> > Methinks thou splitteth hairs.

Well...

How come we say ther-mom-eter and speed-om-eter and o-dom-eter and comp-tom-eter, but we don't say ohm-om-eter, volt-om-eter nor am-om-eter...

And how come we say "how come" when we mean "why do"????
And why is a "K" 1000 in our world and a "K" 1024 in the digital world except for hard drives where a meg is 1,000,000....

...and why am I here... for those who like rhetoricals.

Someone needs something serious to think/talk/post about.

Hmmmm. Me thinketh there needs to be a troll-o-meter, or would it be a troll-om-eter...
73

Boy! spell check sure didn't like this post!
--
Steve N, K,9;d, c. i My email has no u's. and no meters either.

2744. Re: twinlead question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 19:56:04 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <chaidb$4ma$1@newshost.mot.com>
Source record: 90065

"PDRUNEN" <pdrunen@aol.com> wrote in message
news:20040902234707.08241.00000029@mb-m10.aol.com...
> Hi again Group,
>
> Thanks again for the help with the other questions I have posted on the
board.
>
> Does anyone know the hurricane net frequency?

Following is a list of coordination information for Amateur Radio and CERT Personnel who make the decision to evacuate the area. Upon return, after the storm has passed, Amateur Radio Operators and CERT personnel will stage at the Palm Bay BCC north Parking Lot for assignments. If the parking lot is inaccessible or unusable as a staging area. We will stage in the Bayside Lakes Publix Plaza parking lot near Beef O' Brady's.

For Amateur Radio Operators :

Below is a list of frequencies that can be used by amateur radio operators who evacuate the Melbourne/Palm Bay area to stay in touch. We will plan on making contact at 5:00 pm, 6:00pm, and 7:00 pm. on 14.340 MHz. In the event radio communication conditions are bad, try one of the other listed frequencies. We will use these as calling frequencies so once contact is made you and your other party may want to select another frequency to move to or you may wish to remain on frequency and join the group that will be on the frequency.

Operators that remain in the Melbourne/Palm Bay area may also use these frequencies to contact individuals that have departed the area for news etc. if things get slow.

When you return to the area after the storm has passed we will assume no repeaters are left standing and will coordinate our activities on 145.520 Simplex. A net may be established on 145.520 by the time you return. You may be directed by net control to move to a frequency that is not programmed in your radio. You may want to plan on having your radio operating manuals with you when you evacuate. Establishing communications will be our top priority when you return.

145.520 MHz Simplex
14.340 MHz Primary
21.415 MHz
28.335 MHz

If you know of an amateur that is planning on evacuating and is not in the distribution list or did receive this notice, please forward or give a copy

of this message to them Please print this list out and take it with you when you leave the area. Good Luck Stay Safe

Thank You
Steven Hathaway
South Brevard County Emergency Coordinator
DCS Website: http://bellsouthpwp.net/h/a/hathaway/index.html

~~~~~~
DISCLAIMER: The information contained in this e-mail is confidential information intended only for the use of the individual or entity named above. If you have received this in error, please notify us immediately at the e-mail address above and delete the original message.

PUBLIC RECORDS NOTICE: Florida has a very broad public records law. Most written communication, including e-mail, are public records and available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure.
~~~~~~

2745. Re: Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 19:58:32 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <chaihv$4pe$1@newshost.mot.com>
Source record: 90069

You might need a second mortgage if you have to buy the connector.
He doesn't say what size.
Standoff???

"Theplanters95" <theplanters95@aol.comnospam> wrote in message
news:20040903002805.25434.00000024@mb-m04.aol.com...
> I have an offer to purchase some used hardline from a cell phone system.
Is it
> suitable for use on 2m? Can it be run over a shingle roof or does it need
> standoffs? What is a good price for 100 feet with N Connectors?
>
> Here is the email that I received.
>
> It is previously used and not new. If you feel it is worth somthing
> to you, make up a price. I will see if I can find a another N-Female
> connector to go on the other end. Posibly another N-Female for the open
> end. Most of the Hard Line is from Cell Phone towers that are getting up
> graded to a new lower loss feed line. Cell Swept Hard Line is more
> expensive than standard run of the mill. Some Pieces have a ground wire
on
> them and a strain relif for hoisting up the tower (Finger Pusle grip
lock).
>
> Randy ka4nma
> theplanters95 at aol.com
>

2746. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 20:16:48 UTC
From: Another Voice <No_Spam@Hotmail.com>
Message-ID: <4138d13a@post.usenet.com>
Source record: 90064

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Harrison"
> Just how short can a transmission line be
> and still enforce its Zo?

The whole thing is perfectly clear if one imagines applying a step function (rising edge) to any short, even VERY short, length of transmission line. The current in the short line will be equal to V/Zo - at least until the reflections (if any) start arriving back at the input. If the line happen to be terminated with Zo, then no reflections and I=V/Zo is the steady state.

The only issue of shortness is that a very short line means very short time until the reflections arrive.

The step function makes things a lot easier to understand than RF. It 'enforces' the distinction between the transient period and steady state.

-=-=-=

2747. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 20:27:32 UTC
From: aunwin <aunwin@insightbb.com>
Message-ID: <Us4_c.97017$9d6.48321@attbi_s54>
Source record: 90067

This thread is of interest to me in that I like many others have antenna
programs in DOS
Now all computors sare sold with Windows XP which has no provision for dos
Now many programs shown on the given page are also written in DOS and
loosely
describe that it is to be used with a 32 bit console program mode. But there
does not seem to be any specifics
about this or where it can be obtained ,which leads me to think of
discarding all the newer window programs
and backtrack to Windows 98.
So for a newcomer it is not all that simple as compatability is not ensured
when one has a computor
that is four years old or newer.
It also begs the question why, as processors become faster ,one backtracks
by using "32 bits".
Thus the thread initiator has to step carefully to ensure that the program
chosen is compatable
and useable with XP program which now appears to be the choice of today, and
not have to tread though a
range of additional interface additions.
Art

"Ray Anderson" <reanderson@sbcglobal.net> wrote in message
news:ruSZc.15231$tI4.12587@newssvr29.news.prodigy.com...
> Thomas wrote:
>
> >
> > What about free versions of the NEC code?
> >
> > I am interested in modeling a helically wound antenna and so need a lot
> > of segments.
> >
> > Thanks.
> >
> > Thomas
>
> For free packages, I find the 4nec2 program amongst the most powerful
> and easy to use. You can download it from the NEC Archives at
> http://www.qsl.net/wb6tpu/swindex.html
>
> It has most, if not all, of the features of many of the commercial
> packages plus a few that they don't have. I believe the NEC2 engine
> underlying the gui is set up to handle up to 11,000 segments.
>

>
> -Ray WB6TPU

2748. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 20:46:05 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <90lhj0tnsuh631kmq5epoq9m76kfi9fpg9@4ax.com>
Source record: 90068

On Fri, 3 Sep 2004 17:16:48 -0300, "Another Voice" <No_Spam@Hotmail.com> wrote:

>**** Post for FREE via your newsreader at post.usenet.com ****
>
>"Richard Harrison"
>> Just how short can a transmission line be
>> and still enforce its Zo?
>
>The whole thing is perfectly clear if one imagines applying a step function
>(rising edge) to any short, even VERY short, length of transmission line.
>The current in the short line will be equal to V/Zo - at least until the
>reflections (if any) start arriving back at the input. If the line happen
>to be terminated with Zo, then no reflections and I=V/Zo is the steady
>state.
>
>The only issue of shortness is that a very short line means very short time
>until the reflections arrive.
>
>The step function makes things a lot easier to understand than RF. It
>'enforces' the distinction between the transient period and steady state.
>
IMO, the length of the line is irrelevant when using a device such as the Bruene bridge or a Bird 43. Each of those instruments are designed or adjusted to indicate the forward or reflected power, based on three things: 1) ratio of the foward and reflected voltages, the voltage reflection coefficient 2) the scale numbered from 0 to 1, where 0 indicates the reflection is zero, and 1 equals total reflection, but the significant point is that a 3:1 mismatch gives a reflection coefficient of 0.5, which then means that the half-scale reading of 0.5 indicates the 3:1 mismatch, or a 3:1 SWR, and 3) the device is so designed or adjusted so that the voltage ratios indicate the correct value because it's inherent characteristic impedance, Zo, is 50 ohms.

Thus, no transmission line is necessary. For example, the device can be connected directly to the antenna terminals, or any other device you desire to determine the mismatch, and power it directly from the signal source--no transmission line is needed on either port for the device to indicate the degree of mismatch.

Walt, W2DU

2749. Re: Mag Mount ant.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 20:49:40 UTC
From: CW <"no adddress"@spam>
Message-ID: <RP6dnfAImdB-RaXcRVn-vg@comcast.com>
Source record: 90070

Punch CS-28M into Google.

"Richard" <reve6gte@telus.net> wrote in message
news:DE3_c.65041$jZ5.37817@clgrps13...
> I have magnet mount ant model number CS-28M
> It is a 10 meter antenna but I do not know what the
> power handling capability is for this antenna.
> On the bottom section of the antenna obove the magnet mount is printed on
a
> sticker..... CS-28M Signals
> Can any one tell me if this antenna can handle at
> 100 Watts.
> Richard.
>
>
>
>

2750. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 20:54:31 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ps408Forcq2U1@uni-berlin.de>
Source record: 89971

"Richard Harrison" wrote
> IF you were to insert the Model 43 into most 75-ohm transmission
> systems, the precision 50-ohm meter line of 5.125 inches would not
> likely enforce the 50-ohm V/I ratio and the meter reading would be in
> error.

Yet a 50 ohm RF bridge or network analyzer with a 75 ohm termination applied directly at its output port has no trouble showing the true SWR. These measuring devices are looking at the same transition plane from 50 to 75 ohms as the Bird 43 would see with a 75 ohm load at its output port.

If the Model 43 is unable to make an accurate measurement of this, is that not due to reasons other than not having the right 50-ohm V/I ratio in its line section?

RF

2751. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 23:24:37 UTC
From: Ray Anderson <reanderson@sbcglobal.net>
Message-ID: <V27_c.15582$N44.10089@newssvr29.news.prodigy.com>
Source record: 89972

aunwin wrote:
> This thread is of interest to me in that I like many others have antenna
> programs in DOS
> Now all computors sare sold with Windows XP which has no provision for dos
> Now many programs shown on the given page are also written in DOS and
> loosely
> describe that it is to be used with a 32 bit console program mode. But there
> does not seem to be any specifics
> about this or where it can be obtained ,which leads me to think of
> discarding all the newer window programs
> and backtrack to Windows 98.

Don't have time to address all the issues with all the programs
available in the archives, but 4nec2 works just fine with both Win98 and
WinXP. It is a true Windows application (the actual NEC2 engine does
come up in a DOS window, but all user interaction is via Windows).

-Ray

2752. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-03 23:39:14 UTC
From: Kingfish <nospam@nospam.net>
Message-ID: <g10ij0l9d94sqj3j3vr82tkf3419oe20u8@4ax.com>
Source record: 89973

I use several DOS programs that run perfectly in XP. XP is based on
the NT Kernel, therefore, the 'DOS' that you actually see, is merely
an emulation. By right clicking the .exe, selecting Properties and
selecting Compatibility Mode under the Compatibility tab, you can
probably run most anything you want. At lease I have found this to be
the case.
Kingfish

On Fri, 03 Sep 2004 20:27:32 GMT, "aunwin" <aunwin@insightbb.com>
wrote:

>This thread is of interest to me in that I like many others have antenna
>programs in DOS
>Now all computors sare sold with Windows XP which has no provision for dos
>Now many programs shown on the given page are also written in DOS and
>loosely
>describe that it is to be used with a 32 bit console program mode. But there
>does not seem to be any specifics
>about this or where it can be obtained ,which leads me to think of
>discarding all the newer window programs
>and backtrack to Windows 98.
>So for a newcomer it is not all that simple as compatability is not ensured
>when one has a computor
> that is four years old or newer.
>It also begs the question why, as processors become faster ,one backtracks
>by using "32 bits".
>Thus the thread initiator has to step carefully to ensure that the program
>chosen is compatable
>and useable with XP program which now appears to be the choice of today, and
>not have to tread though a
>range of additional interface additions.
>Art
>
>
>
>
>"Ray Anderson" <reanderson@sbcglobal.net> wrote in message
>news:ruSZc.15231$tI4.12587@newssvr29.news.prodigy.com...
>> Thomas wrote:
>>
>> >
>> > What about free versions of the NEC code?
>> >
>> > I am interested in modeling a helically wound antenna and so need a lot
>> > of segments.

>> >
>> > Thanks.
>> >
>> > Thomas
>>
>> For free packages, I find the 4nec2 program amongst the most powerful
>> and easy to use. You can download it from the NEC Archives at
>> http://www.qsl.net/wb6tpu/swindex.html
>>
>> It has most, if not all, of the features of many of the commercial
>> packages plus a few that they don't have. I believe the NEC2 engine
>> underlying the gui is set up to handle up to 11,000 segments.
>>
>>
>> -Ray WB6TPU
>

2753. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 01:11:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chb4n7ihq1@sparta.btinternet.com>
Source record: 89974

> It's not the UHF frequency of the very local mini transmitters which cause
> the interference.
>
> It is the broadband signals which come in via the phone wires between
> computer and the local telephone exchange. They mostly affect the 160 and
80
> meter bands.
>
==========

But I hasten to add that nearby amateur radio stations, as well as MF and HF high-power broadcasting stations can interfere with ordinary broadband internet services.

Interference is likely to be intermiitent, or unregonised as such, So there are few ways of proving or dis-proving a particular source. It's a matter of random statistics.

The legal facts of the situation are that amateurs are licensed to transmit with a given transmitter power within precisely defined bands of frequencies which indeed they conscientiously adhere to. And internet services are not required to respond in any way whatsoever to such legal transmissions. If they do so respond or are affected by such legal transmissions then it can only be due to some weakness or fault in design or manufacture of their (the Internet) equipment affected.

In the none-too-distant future the quality of Internet sevices will depend entirely on the signal-to-interference ratios. The problem can ultimately be solved only by having light-fibres laid to everybody's front door. Which, of course, will be expensive.

Inevitably, Economics decided by the most-powerful of the multinationals will Rule. Unfotunately, so-called democratic governments will have very little say in the matter. As is already very apparent.

But us computer-owners are all so rich these days who cares about the details?

Let's think a little about the Iraquis, deprived of essential electricity, educational, medical, food, clean water, transport, police, social and hospital sevices, etc.

The Vietnamese and Cambodian victims of weapons of mass destruction, after 30 years, are gradually getting back to normal - apart, of course, from the genetically deformed and mentally deficient babies, the result of deliberate poisoning and bombing by a country which imagines itself, not unsurprisingly, to have international enemies.

Reg, G4FGQ

2754. Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 01:47:45 UTC
From: ku4yp <ku4yp@verizon.net>
Message-ID: <599_c.677$Va5.488@trnddc01>
Source record: 89975

i have a question.

in reference to station grounding, i have read keep the grounding strap as short as possible and not a multiple of a resonant length on the ham bands. with that in mind, even if i ground pieces of equipment to individual ground rods, won't the complete grounding system be long? in my mind i am looking around the room and seeing a grounding system being at least 12 feet long, if i go along the perimeter of the desks (which are in a "U" shape in the room.

trying to grasp this in a practical sense. sorry if it is basic and i am just not understanding it.

not responsible for spelling. :-) any input on this would be most appreciated.

--
73 de KU4YP "A clean ham shack is the
Mike Prevatt sign of a sick mind....."
Advanced Operator
Bartow, Florida Active HF/VHF/Digital

2755. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 02:01:25 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <1f7ij05tilga648a6jpd0mtmegc3ji2u17@4ax.com>
Source record: 89976

On Fri, 3 Sep 2004 14:14:57 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|Richard Fry wrote -
|> The generic function of this meter is to measure the degree of match
|between
|> a source and a load.
|
|----------
|
|Exactly!

Not!

The source plays no role at all. The degree of match that is
indicated is that between the line (or system Zo) and the load Z.

A 50 ohm instrument with a 50 ohm termination shows a reflection
coefficient (or whatever mathematical equivalent you want to use) of
zero regardless of the source impedance.

|So let's call it a TLI.

Let's don't. That's just more bafflegab. Suppose the source impedance
is 25 ohm and the load is 50 ohm. By this new monstrosity of a
definition, the source should be delighted when the "transmitter
loading indicator" says---well---I'm not sure what it says, but I
think the desired number is either 0 or 1. And another source
(transmitter) with a source Z of 100 ohm should be equally happy.
Right?

|Which is what it actually is. Abolish
|the source of confusion and the arguments on what it does.

I'm all for abolishing the confusion too, so why did you add to it?

2756. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 03:11:55 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <%na_c.143554$Lj.66455@fed1read03>
Source record: 89977

"ku4yp" <ku4yp@verizon.net> wrote

> in reference to station grounding, i have read keep the grounding
strap
> as short as possible and not a multiple of a resonant length on the ham
> bands. with that in mind, even if i ground pieces of equipment to
individual
> ground rods, won't the complete grounding system be long? in my mind i am
> looking around the room and seeing a grounding system being at least 12
feet
> long, if i go along the perimeter of the desks (which are in a "U" shape
in
> the room.
>
> trying to grasp this in a practical sense. sorry if it is basic and i
am
> just not understanding it.
>
Hi Mike. "Single Point ground"...this means *not* daisy-chaining to a bus bar behind equipment tables if possible, and connecting each piece of equipment to one (1) point that becomes the station's single point ground. *Not* several ground rods from "individual" equipment. After you collect all the station bonding straps at a single point, then you run to a very close ground rod. After you hit that first single ground rod with the bus from all station equipment, *then* you can branch out in a wide and plentiful ground field that bonds to all your antenna, towers, masts, and last but definitely not least, a direct low impedance and high current capable bond to the main AC service ground rod of your home. The RF portion of the ground can accomodate parallel connections to multiple ground rods in close to the station if necessary. They must be part of the lightning protection ground, never separate from it. There are tons of resources for this and lots of experts here in this group. You can also try this website I built just for those questions...one of the pages addresses RF grounds from the transmitter.

http://members.cox.net/pc-usa/station/grounding.htm

73,

Jack
Virginia Beach

2757. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 03:24:22 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41393706_5@corp.newsgroups.com>
Source record: 89978

Richard Fry wrote:
> The coax sampling sections for RF frequencies at least as low as 540
> kHz. is around 9" in length.

The guys over on s.p.e said it has something to do with conductor
spacing Vs conductor length. They said a 100/1 ratio is plenty
long enough for Z0 to assert itself.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2758. Re: Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 04:34:37 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040904003437.13148.00000121@mb-m28.aol.com>
Source record: 89979

He think it is Andrews LDF-5 or 6 (7/8") it can be run on the roof. Center conductor is a hollow tube.

Randy ka4nma

2759. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 08:42:57 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <hQWEJwKRAYOBFA7K@ifwtech.co.uk>
Source record: 89980

Jack Painter wrote:
>"Single Point ground"...this means *not* daisy-chaining to a bus bar
>behind equipment tables if possible, and connecting each piece of
>equipment to one (1) point that becomes the station's single point
>ground. *Not* several ground rods from "individual" equipment. After
>you collect all the station bonding straps at a single point, then you
>run to a very close ground rod. After you hit that first single ground
>rod with the bus from all station equipment,

OK, I follow all that; but it doesn't fully address the original poster's question about ground routing inside the operating room.

The question really is: what's the best *practical* way to route the grounding from that single exit point to all the individual pieces of equipment on the operating desks?

Even a small amateur station can be spread over several feet of desk; L-shaped corner layouts are very common; and the OP is talking about an even larger U-shaped layout. This means the distances from individual items of equipment to the common the ground exit point can range from a few feet up to even a few tens of feet (in terms of the minimum practical distance around the rear of the desks). Also, modern amateur stations are heavily cross-connected by signal/data/control cables, which provide additional paths for damaging current surges to get inside the equipment.

Everyone agrees (I hope) that the objective is to keep all the equipment at the same potential, even when the local ground potential "bounces" due to a nearby strike. Above all, the objective is to avoid current surges going through the insides of individual items - those are what do the damage.

For all the practical reasons outlined above, I don't believe there is a completely "right" answer to the grounding problem inside the operating room. Every practical method seems to have some drawbacks.

Based on your experience, what are your views about that specific problem, Jack?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2760. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 10:07:53 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ptifqFo9md6U1@uni-berlin.de>
Source record: 89981

"Wes Stewart" wrote (clip):

>"Reg Edwards" wrote:
> |Richard Fry wrote -
> |> The generic function of this meter is to measure
> |> the degree of match between a source and a load.
> |---
> |Exactly!
>
> Not!
> The source plays no role at all. The degree of match that is
> indicated is that between the line (or system Zo) and the load Z.
> A 50 ohm instrument with a 50 ohm termination shows a reflection
> coefficient (or whatever mathematical equivalent you want to use) of
> zero regardless of the source impedance.

I wrote "BETWEEN a source and a load," not OF the source
and a load. There is a difference.

RF

2761. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 10:53:01 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <4QBC59MN6ZOBFAoz@ifwtech.co.uk>
Source record: 89982

Richard Fry wrote:
>"Wes Stewart" wrote (clip):
>
>>"Reg Edwards" wrote:
>> |Richard Fry wrote -
>> |> The generic function of this meter is to measure
>> |> the degree of match between a source and a load.
>> |---
>> |Exactly!
>>
>> Not!
>> The source plays no role at all. The degree of match that is
>> indicated is that between the line (or system Zo) and the load Z.
>> A 50 ohm instrument with a 50 ohm termination shows a reflection
>> coefficient (or whatever mathematical equivalent you want to use) of
>> zero regardless of the source impedance.
>_____
>
>I wrote "BETWEEN a source and a load," not OF the source
>and a load. There is a difference.

The only difference between those two terms is that "match between" is normal and grammatical technical usage; and "match of" ain't neither.

Wes is correct. What the meter measures is the match (expressed as reflection coefficient, SWR, whatever) between the system Zo for which that meter was designed and calibrated, and the load Z.

The meter measures nothing that involves the source, except the level of RF that it supplies. It does not respond in any way whatever to the source impedance.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2762. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 11:23:28 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ptmtgForu4oU1@uni-berlin.de>
Source record: 89983

"Ian White, G3SEK wrote
>The meter measures nothing that involves the source, except
>the level of RF that it supplies. It does not respond in any way
>whatever to the source impedance.

Not that I said it did in my part of the thread, but nevertheless the above statement is not strictly true. In the case where the source Z of the tx PA does not match its load Z (which is typical), power reflected from the load mismatch will at least partly be re-reflected from the PA -- which then contributes to the power sensed by a "wattmeter" in the output path.

RF

2763. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 11:42:45 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pto1lFo7v7tU1@uni-berlin.de>
Source record: 89984

"Richard Clark" wrote
>"Richard Fry" wrote:
> >It is also clear from the above values how much better the
> >low freq MW broadcast channels perform.
>
> Hi OM,
>
> You have a remarkable capacity to find controversy where there is
> none.
>
> Again, what is the contention that is your point?
>
> 73's
> Richard Clark, KB7QHC

You quote only a part of my post with which you happen to agree, and then say I find controversy when there is none.

The point of my last post on this subject, and our <<real>> controversy here relates to which characteristic of sea water is responsible for its lower groundwave path loss, as developed in the thread. You wrote that the reason is because sea water is a good reflector. I wrote that it is because of its good conductivity. This difference in our positions should be evident by reading the thread.

RF

2764. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:11:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ptpo6Fp4qhpU1@uni-berlin.de>
Source record: 89985

"ku4yp" <ku4yp@verizon.net> wrote
> in reference to station grounding, i have read keep
>the grounding strap as short as possible and not a multiple
>of a resonant length on the ham bands. (etc)

Unless your antenna requires an earth ground as an integral part of its design, the length or number of ham band wavelengths, or even the existence of a metallic path to earth is irrelevant to the radiation characteristics of the antenna itself.

Still, a good earth ground and other means are desirable to protect your equipment from lightning transients, as developed by Jack Painter on his informative website link earlier in this thread.

Here is a re-post of some earlier text I posted about the need for an "antenna ground."

GW asked (clip):
> How do you determine the quality of an antenna ground at HF
>on an absolute basis? Not how well have I maximized what
>Mother Nature gave me at my QTH by adding radials, but
>how good is my ground compared to other stations' grounds
>at other locations?

A low-resistance ground connection for a transmit antenna is important to the received signal level only when the antenna design requires it as a reference for its driven element, such as with the vertical radiators used in MW broadcasting.

Most HF/VHF/UHF transmit antennas do not need, or use an earth ground for efficient radiation. As practical proof of this, recall that airborne antennas have no connection at all to earth ground, but still work just fine.
And the transmit antennas used in commercial FM & TV broadcast are installed at the top of a tall tower, many wavelengths (and ohms) above earth potential. The tower is grounded for safety reasons, but the radiation patterns and received signal levels from those antennas would be the same even if that tower was not grounded.

RF

Visit http://rfry.org for FM broadcast RF system papers.

2765. Re: Cell Phone Hardline

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:38:09 UTC
From: Dave <noone@nowhere.com>
Message-ID: <m4ydnZ_U65CpKqTcRVn-hA@crocker.com>
Source record: 89986

free is a good price. anything more and you are paying to take out their garbage. connectors can be built for most hardlines from simple plumbing fittings and common connectors and adapters. it would run over a shingle roof just fine, you just want to make sure it doesn't flop around or it could wear on the shingles or rub through it's outer jacket.

"Theplanters95" <theplanters95@aol.comnospam> wrote in message news:20040903002805.25434.00000024@mb-m04.aol.com...
> I have an offer to purchase some used hardline from a cell phone system. Is it
> suitable for use on 2m? Can it be run over a shingle roof or does it need
> standoffs? What is a good price for 100 feet with N Connectors?
>
> Here is the email that I received.
>
> It is previously used and not new. If you feel it is worth somthing
> to you, make up a price. I will see if I can find a another N-Female
> connector to go on the other end. Posibly another N-Female for the open
> end. Most of the Hard Line is from Cell Phone towers that are getting up
> graded to a new lower loss feed line. Cell Swept Hard Line is more
> expensive than standard run of the mill. Some Pieces have a ground wire on
> them and a strain relif for hoisting up the tower (Finger Pusle grip lock).
>
> Randy ka4nma
> theplanters95 at aol.com
>

2766. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:39:56 UTC
From: "Just a suggestion..." <3760kHz@Hotmail.com>
Message-ID: <4139b79e$1@post.usenet.com>
Source record: 89987

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Fry" and "Richard Clark" argue about:
> ...which characteristic of sea water is responsible
> for its lower groundwave path loss...
> ...because sea water is a good reflector.
> ...because of its good conductivity.

Is sea water a good reflector because it has good conductivity ?

;-)

-=-=-=

2767. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:45:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <gsWdnewCLv1IJaTcRVn-oA@crocker.com>
Source record: 89989

'as short as possible' it the important phrase. its not always possible to keep it really short. another important part is keeping it as fat as possible, meaning use heavy wire or, even better, something like copper flashing, aluminum flashing or angle stock, or something like that. aluminum angle stock that you find in 6-8' lengths in hardware stores makes excellent ground busses, its easily drilled for connections to equipment, can be easily bolted together at corners, and makes a nice neat installtion... use the 1" or wider stuff if you can get it. do not use multiple ground rods unless you also connect them all together outside... and if you do drive a 'station' ground rod be sure it is also connected outside with heavy conductor to your existing power entrance ground. and while you are at it make sure the power entrance is also connected to your water pipe coming in, pool filter ground, outdoor light ground, and anything else grounded outside the house.

"ku4yp" <ku4yp@verizon.net> wrote in message
news:599_c.677$Va5.488@trnddc01...
> i have a question.
>
> in reference to station grounding, i have read keep the grounding
strap
> as short as possible and not a multiple of a resonant length on the ham
> bands. with that in mind, even if i ground pieces of equipment to
individual
> ground rods, won't the complete grounding system be long? in my mind i am
> looking around the room and seeing a grounding system being at least 12
feet
> long, if i go along the perimeter of the desks (which are in a "U" shape
in
> the room.
>
> trying to grasp this in a practical sense. sorry if it is basic and i
am
> just not understanding it.
>
> not responsible for spelling. :-) any input on this would be most
> appreciated.
>
> --
> 73 de KU4YP "A clean ham shack is the
> Mike Prevatt sign of a sick mind....."
> Advanced Operator
> Bartow, Florida Active HF/VHF/Digital
>

>

2768. Re: Antenna matching 433MHz

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:45:42 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <g4ejj09ol0j32osvh2lvb0lfmsj1bjum2b@4ax.com>
Source record: 89988
Cross-posted to: sci.electronics.design,rec.radio.amateur.antenna

On Sat, 04 Sep 2004 13:33:25 +0200, Andreas <somewhere@else.com>
wrote:

>I have problems to match an pcb antenna of a small embedded ï¿½C
>controlled RF-system. The frequency is 433MHz, matching target is 50
>Ohm, antenna is very small, about lambda/10. Therefore the antenna
>radiation resistance is very low, about 1 Ohm, and it behaves
>capacitive. Let's say we have a complex Z=1-j60 Ohm. Now I can calculate
>or use a smith chart to get a matching network. Simulation with RFSIM
>showed that calculation is correct, but if I measure the pcb with
>antenna and matching network with an HP spectrum analyzer, I don't get
>50 Ohm. What goes wrong? Do I have to consider a more complex physical
>model of the used inductors and capacitances with its resonant
>frequencies, Q etc.? Any hints?
>Thanks!

What are you expecting to see with a spectrum analyser??
This sounds like a job for those knowledgeable folks at
rec.radio.amateur.antenna (added herewith).
--

"What is now proved was once only imagin'd." - William Blake, 1793.

2769. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:59:12 UTC
From: "Just a suggestion..." <3760kHz@Hotmail.com>
Message-ID: <4139bc22@post.usenet.com>
Source record: 89990

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Fry"
> Still, a good earth ground and other means
> are desirable to protect your equipment from
> lightning transients...

Any 'Theory of Lightning' needs to be capable of including airplanes and their general success at lightning protection - obviously sans earth grounding. Typical airplanes get hits several times per year - often with no damage. 'Airplanes' is such an obvious one-word counter example to soooooo many arguments about the "necessity" (sic) earth grounding...

I'm glad you used the words "...and other means" and "desirable". You're not guilty.

Personally, I believe that a Faraday Cage (with appropriate entrance protection) would be far more effective than fiddling with (optional) earth grounds. Since most commercial buildings are metal or equivalent, this gives the 'lightning professional' a huge advantage over the amateur (in his wooden house). Much of what works for 'professional' lightning protection works ~because~ the commercial installation is in a metal building. This point needs to be acknowledged by those professing their experience while advising the amateur in his wooden house full of lengthy, low voltage signal wires. Having 20,000 amps surging (uh oh - 'surge' - that'll trigger off the 'w_tom' idiobot - sorry) down the ground wire is obviously going to cause 'sparks' in adjacent wires and cables and 'minor' equipment damage - even with a perfect earth ground.

-=-=-=

2770. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 12:59:43 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <Ly9uxaP$wbOBFANe@ifwtech.co.uk>
Source record: 89991

Richard Fry wrote:
>"Ian White, G3SEK wrote
>>The meter measures nothing that involves the source, except
>>the level of RF that it supplies. It does not respond in any way
>>whatever to the source impedance.
>----------
>
>Not that I said it did in my part of the thread, but nevertheless the above
>statement is not strictly true. In the case where the source Z of the tx PA
>does not match its load Z (which is typical), power reflected from the load
>mismatch will at least partly be re-reflected from the PA -- which then
>contributes to the power sensed by a "wattmeter" in the output path.

Sorry, that statement cannot be correct. It would mean that the impedance you measure at the near end of a transmission line (terminated by some arbitrary load at the far end) would depend on the internal impedance of the device that's doing the measuring - and that is not true, either in transmission-line theory or in the real world. It is a function only of the line and the load.

Others can probably explain why the statement is also incorrect according to the concept of "forward and reflected power waves". Myself, I prefer avoid that concept completely, because it so easily leads into this kind of mess.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2771. Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 13:06:11 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <73fjj09bk8qu0ckiadsr3gfo9r0ejmdqct@4ax.com>
Source record: 89992

I just picked up some small egg insulators and have a question.

I had assumed that the wire went through the hole, was routed back in the groove to the far end of the insulator, and was twisted back on the standing part. The two loops overlap, as it were. However, the groove for the wire continues all around the egg, including the near end of the insulator opposite the standing part. This suggests some kind of fancy wire routing is expected.

How come they continue the groove all around? Do these sometimes get used with the insulator in tension and the loops not overlapping?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

2772. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 13:25:42 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2ptu2mFp80koU1@uni-berlin.de>
Source record: 89993

"Ian White, G3SEK"wrote:
> Richard Fry wrote:
> >"Ian White, G3SEK wrote
> >>The meter measures nothing that involves the source, except
> >>the level of RF that it supplies. It does not respond in any way
> >>whatever to the source impedance.
> >
> >Not that I said it did in my part of the thread, but nevertheless the
above
> >statement is not strictly true. In the case where the source Z of the tx
PA
> >does not match its load Z (which is typical), power reflected from the
load
> >mismatch will at least partly be re-reflected from the PA -- which then
> >contributes to the power sensed by a "wattmeter" in the output path.
>
> Sorry, that statement cannot be correct. It would mean that the
> impedance you measure at the near end of a transmission line (terminated
> by some arbitrary load at the far end) would depend on the internal
> impedance of the device that's doing the measuring - and that is not
> true, either in transmission-line theory or in the real world. It is a
> function only of the line and the load. etc

How, then, do you explain the "ghost image" that can occur* in analog(ue) TV transmission systems arising from reflections at/near the antenna end of the station's transmission line?

*with sufficient round-trip propagation time in the transmission line

RF

2773. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 13:33:48 UTC
From: "Jumping up and down..." <Stomping_Feet@Hotmail.com>
Message-ID: <4139c43e@post.usenet.com>
Source record: 89994

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Fry"
> How....do you explain the "ghost image" .... TV

Sigh - moth + lamp (not you RF specifically, the newsgroup...).

LOOK - Discuss a simple step function (rising edge) - not RF. All of your disagreements about SWR and reflections will be revealed as silly semantics and the mixing up of the transient versus the steady state. A step function makes it so simple that there is no room for arguments.

There is NOTHING in the endless (and now repeating) discussion other than semantics and the above mention lack of discernment (initial transient versus steady state).

-=-=-=

2774. How to measure SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 14:08:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chci9l$r10$1@titan.btinternet.com>
Source record: 89995

For those who have forgotten how or have never measured SWR.

Two separate voltage measurements are needed at two different places along
the line.
Slide the voltmeter along the line until a maximum is found.
Remember the reading, Vmax.
Slide the meter along the line again until a minimum is found.
Remember the reading, Vmin.
Before you forget, divide Vmax by Vmin.
You are left with a single number.
It has no dimensions.
It is the TRUE swr.

NOTE: In the above description and calculation there is no mention of Zo,
terminating impedance, source impedance, reflection coefficient, forward
power, reflected power, reflected volts, reflected current, Smith charts, or
conjugate matches. All these things are superflous to the determination. No
information other than the two voltage measurements is needed.

All other methods which purport to measure swr require injection of
additional information. And assumptions form an essential part of the
process. They can hardly be called swr measurements. Particularly when
they can indicate it on non-existent lines.

2775. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 14:55:26 UTC
From: richardharrison@webtv.net
Message-ID: <29448-4139D75E-184@storefull-3257.bay.webtv.net>
Source record: 89997

Richard Fry wrote:
"If the Model 43 is unable to make an accurate masuremnt of this, is that not due to reasons other than not having the right V/I ratio in its line section?"

Many details of desisn, construction, and application must be chosen and executed right to get accuracy, but the line impedance is essential.

Bird can adjust the current sample to exactly equal the voltage sample, both taken from the transmission line at any point. But it must work with a fixed voltage to current ratio. Bird chose 50 onms.

For a directional meter, it`s necessary to respond to one direction while rejecting the other. When power is applied to a line, the resulting current is is in phase with the volts. On reflection, the volts and amps in the reflected wave are 180 degrees out of phase. The phase difference of the reflected wave is used by Bird to distinguish it from the incident wave.

By selecting and adjusting for equal samples of volts and amps in the forward wave, their total is 2X that of either sample. But, the samples from the reflected wave, being equal but out of phase, cancel.

To get the value of the reflected power samples, it is only necessary to reverse the polarity of one of the samples. They are now in phase and the forward power samples are now out of phase and cancel.

If some other voltage to current ratio is used for the power samples than that of the design, the samples won`t be exactly equal and cancellation of the undesired direction does not work.

Best regards, Richard Harrison, KB5WZI

2776. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 14:56:04 UTC
From: Dave <noone@nowhere.com>
Message-ID: <SeudnXjNu4waSqTcRVn-tA@crocker.com>
Source record: 89996

maybe so you can use them either direction? possibly to make the mold
symmetric which is usually easier to fabricate?

"Ken" <cprstn54zz@att.net> wrote in message
news:73fjj09bk8qu0ckiadsr3gfo9r0ejmdqct@4ax.com...
> I just picked up some small egg insulators and have a question.
>
> I had assumed that the wire went through the hole, was routed back in
> the groove to the far end of the insulator, and was twisted back on
> the standing part. The two loops overlap, as it were. However, the
> groove for the wire continues all around the egg, including the near
> end of the insulator opposite the standing part. This suggests some
> kind of fancy wire routing is expected.
>
> How come they continue the groove all around? Do these sometimes get
> used with the insulator in tension and the loops not overlapping?
>
> Ken KC2JDY
>
>
> Ken
> (to reply via email
> remove "zz" from address)

2777. Re: How to measure SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 15:14:50 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4139dd82$1_1@corp.newsgroups.com>
Source record: 90000

Reg Edwards wrote:
> All other methods which purport to measure swr require injection of
> additional information. And assumptions form an essential part of the
> process. They can hardly be called swr measurements.

They can be called indirect (calculated) SWR measurements
and assumptions indeed do form an essential part of the
process. That's not at all unusual for indirect measurements.

> Particularly when they can indicate it on non-existent lines.

One of the assumptions is that a transmission line exists. If
a transmission line doesn't exist, the measurement conditional
assumptions are violated, and the actual values may not be
the desired or expected results. Happens all the time with
various measuring instruments.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2778. Re: How to measure SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 15:17:24 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <LCzudRXEydOBFAuZ@ifwtech.co.uk>
Source record: 89998

Reg Edwards wrote:
>For those who have forgotten how or have never measured SWR.
>

Hang on, Reg - didn't you spend your career working on VLF cables that went under the ocean?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2779. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 15:17:55 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <FyatBrXjydOBFAtm@ifwtech.co.uk>
Source record: 89999

Richard Fry wrote:
>"Ian White, G3SEK"wrote:
>> Richard Fry wrote:
>> >"Ian White, G3SEK wrote
>> >>The meter measures nothing that involves the source, except
>> >>the level of RF that it supplies. It does not respond in any way
>> >>whatever to the source impedance.
>> >
>> >Not that I said it did in my part of the thread, but nevertheless the
>above
>> >statement is not strictly true. In the case where the source Z of the tx
>PA
>> >does not match its load Z (which is typical), power reflected from the
>load
>> >mismatch will at least partly be re-reflected from the PA -- which then
>> >contributes to the power sensed by a "wattmeter" in the output path.
>>
>> Sorry, that statement cannot be correct. It would mean that the
>> impedance you measure at the near end of a transmission line (terminated
>> by some arbitrary load at the far end) would depend on the internal
>> impedance of the device that's doing the measuring - and that is not
>> true, either in transmission-line theory or in the real world. It is a
>> function only of the line and the load. etc
>_____________
>
>How, then, do you explain the "ghost image" that can occur* in analog(ue) TV
>transmission systems arising from reflections at/near the antenna end of the
>station's transmission line?
>
>*with sufficient round-trip propagation time in the transmission line

Yes, that is a true observation, just as true as the one I made... so
now you have *two* different things to explain!

The so-called SWR meter is a steady-state instrument, so it always makes
sense to use that quicker, easier way of thinking. Since you're the one
who chooses to think of this particular situation in terms of multiple
reflections, any difficulties you encounter are entirely yours.

If you ever see a conflict between two different theories that explain
the same observed facts, then there's an error somewhere. If the
multiple-reflection theory is extrapolated to infinite time, so that it
calculates results for the steady state, it *must* give identical
results to the steady-state theory. But whenever the steady-state theory
can be used, it will always get you there much more quickly.

However, when you have finally done it your way, and accounted correctly for all the reflections and re-reflections, we can predict the outcome with complete confidence:

1. If you sum the successive reflections correctly to infinity, and calculate the V/I ratio and phase at the station end of the line, then the final result will be identical to the impedance given by the steady-state transmission-line theory. It has to be, because that single value is the reality.

2. Somewhere in your calculations, any value that you assume for the RF source impedance is going to cancel right out of your calculations. The correct mathematical result *must* be independent of that value - because, again, that's the reality.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2780. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 15:23:05 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <jfljj05v8tt5p6epthl4qi9tq9car4kipb@4ax.com>
Source record: 90001

On Sat, 4 Sep 2004 06:23:28 -0500, "Richard Fry" <rfry@adams.net>
wrote:

|"Ian White, G3SEK wrote
|>The meter measures nothing that involves the source, except
|>the level of RF that it supplies. It does not respond in any way
|>whatever to the source impedance.
|_____________
|
|Not that I said it did in my part of the thread, but nevertheless the above
|statement is not strictly true. In the case where the source Z of the tx PA
|does not match its load Z (which is typical), power reflected from the load
|mismatch will at least partly be re-reflected from the PA -- which then
|contributes to the power sensed by a "wattmeter" in the output path.

If you have a directional wattmeter that *perfectly* senses and
displays the ratio of forward to reverse power, what difference does
the absolute power make? Hint: It doesn't.

But let's avoid going any further here. This has been argued about in
at least 10,000 other threads and has absolutely no bearing on Ian's
or my statements regarding the unimportance of source Z in the
discussion of measuring reflection coefficient.

In a laboratory environment, the source is usually well matched at the
system impedance. This is for convenience and improves accuracy only
because is takes less mathematical horsepower to remove the effects of
the "re-reflection" you speak of. This is particularly true when
highly mismatched loads are measured; and two of the most highly
mismatched loads are an open and a short, both of which are often used
as calibration standards.

Re-reflection exists and is actually an undesired thing in laboratory
measurements, primarily because most measurements are swept frequency
and the changing phase of the reflections is a pain in the ass.
Reflections are a source of *measurement error*. Removing the effects
is called *error correction* in the laboratory setting.

But I can tell you that if I calibrate a high-quality network analyzer
using a 50 ohm generator and then add a tee and second 50 ohm load to
the generator output, making it a 2:1 mismatched source, there will be
no significant change in the answer presented when typical
mismatches are measured.

Any differences represent measurement *error*, not measurement
reality. Reality is the interaction of the line and load and the

source plays *no* role.

2781. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 16:26:44 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <81m_c.11692$QJ3.3596@newssvr21.news.prodigy.com>
Source record: 90002

Ian White, G3SEK wrote:

>
>
> Yes, that is a true observation, just as true as the one I made... so
> now you have *two* different things to explain!
>
> The so-called SWR meter is a steady-state instrument, so it always makes
> sense to use that quicker, easier way of thinking. Since you're the one
> who chooses to think of this particular situation in terms of multiple
> reflections, any difficulties you encounter are entirely yours.
>
> If you ever see a conflict between two different theories that explain
> the same observed facts, then there's an error somewhere. If the
> multiple-reflection theory is extrapolated to infinite time, so that it
> calculates results for the steady state, it *must* give identical
> results to the steady-state theory. But whenever the steady-state theory
> can be used, it will always get you there much more quickly.
>
> However, when you have finally done it your way, and accounted correctly
> for all the reflections and re-reflections, we can predict the outcome
> with complete confidence:
>
> 1. If you sum the successive reflections correctly to infinity, and
> calculate the V/I ratio and phase at the station end of the line, then
> the final result will be identical to the impedance given by the
> steady-state transmission-line theory. It has to be, because that single
> value is the reality.
>
> 2. Somewhere in your calculations, any value that you assume for the RF
> source impedance is going to cancel right out of your calculations. The
> correct mathematical result *must* be independent of that value -
> because, again, that's the reality.
>
>

This is correct. If you divide the formula for voltage, at any point on
a transmission line, by the formula for current, the generator impedance
cancels.
73,
Tom Donaly, KA6RUH

2782. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 16:46:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <63sjj05s6q6cuagfjdoas4pnisli1tc3r9@4ax.com>
Source record: 90003

On Sat, 4 Sep 2004 06:42:45 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>You quote only a part of my post

Hi OM,

I don't quote the full message because it is already available, and
further, it is bad manners to do so unless something new and relevant
has been offered. None so appears.

73's
Richard Clark, KB7QHC

2783. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 16:54:23 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pua9uFpk30hU1@uni-berlin.de>
Source record: 90004

Pardon the extensive pasting, but it will allow a clearer post, and save a
lot of click time. / RF

"Ian White, G3SEK" wrote :
> >> >>The meter measures nothing that involves the source, except
> >> >>the level of RF that it supplies. It does not respond in any way
> >> >>whatever to the source impedance.
> >> >
> > Richard Fry wrote:
> >Not that I said it did in my part of the thread, but nevertheless the
> >above statement is not strictly true. In the case where the source Z
> > of the tx PA does not match its load Z (which is typical), power
> >reflected from the load mismatch will at least partly be re-reflected
> >from the PA -- which then contributes to the power sensed by a
> > "wattmeter" in the output path.
> >>
"Ian White, G3SEK" wrote :
> >> Sorry, that statement cannot be correct. It would mean that the
> >> impedance you measure at the near end of a transmission line
<> >>terminated by some arbitrary load at the far end) would depend
> >> on the internal impedance of the device that's doing the
> >> measuring - and that is not true, either in transmission-line
> >> theory or in the real world. It is a function only of the line and
> >> the load. etc
>>
Richard Fry wrote:
> >How, then, do you explain the "ghost image" that can occur* in
> > analog(ue) TV transmission systems arising from reflections
> > at/near the antenna end of the station's transmission line?
> >
> >*with sufficient round-trip propagation time in the transmission line

Ian White wrote:
> Yes, that is a true observation, just as true as the one I made... so
> now you have *two* different things to explain!
>
> The so-called SWR meter is a steady-state instrument, so it always makes
> sense to use that quicker, easier way of thinking. Since you're the one
> who chooses to think of this particular situation in terms of multiple
> reflections, any difficulties you encounter are entirely yours.

This reads to me as though you know they are there, but choose
to ignore them...?

> If you ever see a conflict between two different theories that explain
> the same observed facts, then there's an error somewhere.

We agree on the subject of conflict resolution, but apparently not on
the location of the error.

> If the multiple-reflection theory is extrapolated to infinite time, so
>that it calculates results for the steady state, it *must* give identical
> results to the steady-state theory. But whenever the steady-state
> theory can be used, it will always get you there much more quickly.

This is true only to the extent that all the power ever generated by the
transmitter eventually either is radiated by the antenna or is dissipated by
losses somewhere.

For simplicity, let's assume a tx with a source impedance of zero ohms feeds
a lossless transmission line of uniform impedance throughout its length to a
mismatch at the far end. The mismatch reflects a percentage of the incident
power back down the line to the tx, and continues to do so as long as the
transmitter generates power. The tx will re-reflect the reflected power
back to the far end -- in this case all of the reflected power it ever sees,
in fact. To this easily-seen, real-world reality you agreed above ("Yes,
that is a true observation, ...").

The re-reflections combine with the power generated by the tx at that
instant to create a vector sum at the sample point used by the meter. The
typical tx meter is a frequency-domain device, and cannot by itself separate
the RF output of the transmitter from re-/reflections of it. That requires
a time-domain device. So the magnitude of the transmission line samples
driving the tx RF metering circuits during normal operation under these
conditions become a function of both the source impedance and the
load impedance.

The defense rests.

RF

2784. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 17:04:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g8sjj0133d0alcirq5h35k1lue2tim0bnk@4ax.com>
Source record: 90005

On Sat, 4 Sep 2004 09:39:56 -0300, "Just a suggestion..."
<3760kHz@Hotmail.com> wrote:

>Is sea water a good reflector because it has good conductivity ?

If you think it has good conductivity, do you wire your house with it?
Do you have a radial field using #38 wire in a one meter grid? Both
laughable propositions here, but those tears of mirth turn to the
dewey eyed mist of religious belief when Salt Water "conductivity" is
mentioned.

Sand is the least lossy ground beneath your feet, but how well does it
contribute to DX? Add some water and the loss skyrockets - and this
is called the boon of conductivity!

No, it is called the boon of reflectivity. The Z changed and power
CANNOT penetrate the interface. If you cannot get power into it,
there is nothing to conduct (and it is the molecular polarization and
relaxation moment that causes this, not conductivity).

The legends of mature spinsters are many with respect to the qualities
of ground - they even inspire useless software as crutches. I have
seen NO ONE here who can recommend it (much less admit they don't even
have a clue on what values would be appropriate for their own locale).
Hence most discussion is either faith-driven, speculation, or simple
hucksterism.

73's
Richard Clark, KB7QHC

2785. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 17:09:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <betjj0h6cmqnb31gc5u8gn76ibatsr17uc@4ax.com>
Source record: 90006

On Sat, 4 Sep 2004 13:59:43 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> wrote:

>depend on the internal impedance of the device that's doing the measuring - and that is
not
>true, either in transmission-line theory

Hi Ian,

I see you have yet to respond to this very matter attended to quite at
length by Chipman.

73's
Richard Clark, KB7QHC

2786. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 17:11:52 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pubamFph95iU1@uni-berlin.de>
Source record: 90007

"Richard Clark" wrote
>> Richard Fry wrote:
> >You quote only a part of my post

> it is bad manners to do so unless something new
> and relevant has been offered. None so appears.

I doubt that the majority of readers will agree with you about the relevancy of my posts on this thread to yours. You have simply chosen not to address them.

But in any case...Pax vobiscum.

RF

2787. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 17:18:23 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <BNm_c.144654$Lj.112587@fed1read03>
Source record: 90008

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote
> Jack Painter wrote:
> >"Single Point ground"...this means *not* daisy-chaining to a bus bar
> >behind equipment tables if possible, and connecting each piece of
> >equipment to one (1) point that becomes the station's single point
> >ground. *Not* several ground rods from "individual" equipment. After
> >you collect all the station bonding straps at a single point, then you
> >run to a very close ground rod. After you hit that first single ground
> >rod with the bus from all station equipment,
>
> OK, I follow all that; but it doesn't fully address the original
> poster's question about ground routing inside the operating room.
>
> The question really is: what's the best *practical* way to route the
> grounding from that single exit point to all the individual pieces of
> equipment on the operating desks?
>
> Even a small amateur station can be spread over several feet of desk;
> L-shaped corner layouts are very common; and the OP is talking about an
> even larger U-shaped layout. This means the distances from individual
> items of equipment to the common the ground exit point can range from a
> few feet up to even a few tens of feet (in terms of the minimum
> practical distance around the rear of the desks). Also, modern amateur
> stations are heavily cross-connected by signal/data/control cables,
> which provide additional paths for damaging current surges to get inside
> the equipment.
>
> Everyone agrees (I hope) that the objective is to keep all the equipment
> at the same potential, even when the local ground potential "bounces"
> due to a nearby strike. Above all, the objective is to avoid current
> surges going through the insides of individual items - those are what do
> the damage.
>
> For all the practical reasons outlined above, I don't believe there is a
> completely "right" answer to the grounding problem inside the operating
> room. Every practical method seems to have some drawbacks.
>
> Based on your experience, what are your views about that specific
> problem, Jack?
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

Right Ian, having equipment spread out over a wide area is an undesireable condition, but a reality for many operators. Running 3" wide or greater copper strapping in individual paths to one single bus "collector" is a challenge, but one worth trying. Equipment stacked or racked together could certainly be "grouped" and a common bonding strap run for each group to the SPG. But 20 linear feet of bus bar could have huge transient voltages developed across it from a nearby strike. As in a few hundred thousand volts between supposedly "grounded' equipment. Hence the importance of all equipment connecting to the same ground point, not via a long run of common bus bar to that ground point. Make your compromises according to your individual requirements and station layout. Just realize that in a nearby-by strike, lightning will find the weak points in any system and exploit that weakness to the fullest possibility. I experience numerous nearby strikes that probably raise the ground potential several hundred thousand volts, and expose my entire ground system to those voltages. If there were large potential differences between even bonded equipments in the station, deadly hazards would exist. It's all about choices, and we all have to make them.

Best regards,

Jack Painter
Virginia Beach VA

2788. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 17:25:18 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2puc3tFofu8pU1@uni-berlin.de>
Source record: 90009

Please see my post in this thread of 4 Sept 2004 at 16:54 UT (shown above).

RF

2789. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:01:55 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413a12bc_3@corp.newsgroups.com>
Source record: 90012

Richard Fry wrote:
> This is true only to the extent that all the power ever generated by the
> transmitter eventually either is radiated by the antenna or is dissipated by
> losses somewhere.

The fly in the ointment is a definition.

If a signal generator is sourcing 100 watts and 20 watts of reflected
power is being dissipated in a circulator load resistor, we say the
source is sourcing 100 watts and 20 watts of reflected power is being
dissipated in the circulator load resistor.

If the identical thing happens in a ham transmitter, we say that the
source is sourcing 80 watts, BY DEFINITION. What's wrong with this
picture? Ham transmitters NEVER re-reflect anything, by definition.

The reason that the source impedance doesn't enter into the forward/reflected
power values is that it has been defined out of any relationship to them. By
definition, there is zero power re-reflected from a ham transmitter NO MATTER
WHAT THE IMPEDANCE OF THE HAM TRANSMITTER MIGHT BE. Never mind that we can see
those reflections with our own eyes in TV ghosting. We must be crazy because
they have been defined out of existence. How dare we have the gall to observe
them!
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

2790. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:02:59 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jk4b57htjhd4c@corp.supernews.com>
Source record: 90010

This has been explained many times, to no avail.

So instead of one of us explaining it yet again, I suggest that you do the following experiment. It requires only a transmitter, one or two dummy loads, an SWR meter, and no more than five minutes of your time.

1. Connect the transmitter to either a dummy load or an antenna through the SWR meter and measure the SWR.

2. Connect the transmitter in parallel with a dummy load by using a tee connector. Connect this parallel combination to the input of the SWR meter, and the output of the SWR meter to the same load as before (dummy load or antenna).

Do you see any change in the SWR?

If you don't, then something is wrong with your theory -- since the source impedance is clearly different for the two measurements --, and you should take the effort of resolving it with your recent observations.

Roy Lewallen, W7EL

Richard Fry wrote:
> "Ian White, G3SEK"wrote:
>
>>Richard Fry wrote:
>>
>>>"Ian White, G3SEK wrote
>>>
>>>>The meter measures nothing that involves the source, except
>>>>the level of RF that it supplies. It does not respond in any way
>>>>whatever to the source impedance.
>>>
>>>Not that I said it did in my part of the thread, but nevertheless the
>
> above
>
>>>statement is not strictly true. In the case where the source Z of the tx
>
> PA
>
>>>does not match its load Z (which is typical), power reflected from the
>
> load
>
>>>mismatch will at least partly be re-reflected from the PA -- which then

>>>contributes to the power sensed by a "wattmeter" in the output path.
>>
>>Sorry, that statement cannot be correct. It would mean that the
>>impedance you measure at the near end of a transmission line (terminated
>>by some arbitrary load at the far end) would depend on the internal
>>impedance of the device that's doing the measuring - and that is not
>>true, either in transmission-line theory or in the real world. It is a
>>function only of the line and the load. etc
>
> ____________
>
> How, then, do you explain the "ghost image" that can occur* in analog(ue) TV
> transmission systems arising from reflections at/near the antenna end of the
> station's transmission line?
>
> *with sufficient round-trip propagation time in the transmission line
>
> RF
>
>

2791. Re: How to measure SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:06:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jk4h96ngu1obd@corp.supernews.com>
Source record: 90011

Ian White, G3SEK wrote:

> Reg Edwards wrote:
>
>> For those who have forgotten how or have never measured SWR.
>>
>
> Hang on, Reg - didn't you spend your career working on VLF cables that
> went under the ocean?
>

How did you keep the water out of the slotted cable? And how far did you have to swim between Vmax and Vmin?

Roy Lewallen, W7EL

2792. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:15:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jk52d53lt0p3b@corp.supernews.com>
Source record: 90013

Let me suggest an additional exercise for Richard and anyone else that believes that source impedance affects the SWR.

Those of us who believe otherwise can easily calculate the SWR which will exist on a line, and the SWR that will be read by an SWR meter at any point in a system, by knowing simply the line length and impedance and the load impedance. We don't require knowledge of the source impedance. The equations we use can be found in numerous places, and these have been used for over a century to design working systems.

You must use other equations to predict SWR -- equations which include source impedance. It would be very interesting to see those equations. Your equations and ours will predict different results from the simple test I proposed. So if you'll show us the equation you use to calculate SWR which includes source impedance, it'll be easy to see whether it's correct or not.

Roy Lewallen, W7EL

2793. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:15:57 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413a1606$1_3@corp.newsgroups.com>
Source record: 90014

Richard Clark wrote:
> I see you have yet to respond to this very matter attended to quite at
> length by Chipman.

I have recently realized that those terms in Chipman's equations are
interference terms. EM wave interference is not understood very well
by RF people although it is understood very well by optics people.

For instance, the superposing of two coherent voltages in a Z0
environment is well known.

Vtot = V1 + V2 (assume V1 and V2 are in phase)

Squaring both sides and dividing by Z0 yields the power.

Vtot^2/Z0 = (V1+V2)^2/Z0

Vtot^2/Z0 = V1^2/Z0 + V2^2/Z0 + (2*V1*V2)/Z0

Note that the first term to the right of the equals sign is the
power associated with the V1 wave and the second term is the
power associated with the V2 wave. The third term is the
interference term. If V1 and V2 are in phase, the third term
will be constructive interference.

If the phase angle between V1 and V2 is less than 90 degrees,
the interference is constructive, i.e. cos(theta) is positive.

If V1 and F2 were 180 degrees out of phase, the interference
would be destructive.

If the phase angle between V1 and V2 is between 90 degrees and
180 degrees, the interference is destructive, i.e. cos(theta)
is negative.

Interference is the reason for those extra terms in Chipman's
equations. It always happens when the sum of two voltages
are squared to get the power.

Reference: _Optics_, by Hecht.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

2794. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:46:38 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pukctFp47kaU1@uni-berlin.de>
Source record: 90015

"Roy Lewallen" <w7el@eznec.com> wrote
> Let me suggest an additional exercise for Richard and anyone else that
> believes that source impedance affects the SWR. (etc)

Just one sec, please. I didn't say that the true SWR connected to the tx output connector was affected. I said that the RF power measured at the sample point(s) in the transmitter can be affected by the source and load impedances of the tx, for the reasons stated.

The true load SWR does not change under these conditions, but it cannot then be determined by such a meter. Attempting to do so will yield some value, but it will be wrong.

RF

2795. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 19:55:48 UTC
From: GW <look@signature_to.reply>
Message-ID: <85p_c.338$ip2.169@newsread3.news.pas.earthlink.net>
Source record: 90016

> Sand is the least lossy ground beneath your feet, but how well does it
> contribute to DX? Add some water and the loss skyrockets - and this
> is called the boon of conductivity!
>
> No, it is called the boon of reflectivity. The Z changed and power
> CANNOT penetrate the interface. If you cannot get power into it,
> there is nothing to conduct (and it is the molecular polarization and
> relaxation moment that causes this, not conductivity).

It's been many years since my EM theory days in school, but I seem to remember being taught that the way surfaces reflect EM waves is by being excited by the impinging wave and then re-radiating due to the current flow caused by the arriving wave. This would require the surface to be a good conductor to be a good reflector.

2796. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 20:12:13 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2pulssFpmabrU1@uni-berlin.de>
Source record: 90017

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:63sjj05s6q6cuagfjdoas4pnisli1tc3r9@4ax.com...
> On Sat, 4 Sep 2004 06:42:45 -0500, "Richard Fry" <rfry@adams.net>
> wrote:
> >You quote only a part of my post

> I don't quote the full message because it is already available, and
> further, it is bad manners to do so unless something new and relevant
> has been offered.

(Three hours later)

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:g8sjj0133d0alcirq5h35k1lue2tim0bnk@4ax.com...
> On Sat, 4 Sep 2004 09:39:56 -0300, "Just a suggestion..."
> <3760kHz@Hotmail.com> wrote:
>
> >Is sea water a good reflector because it has good conductivity ?
(clippage)
> The legends of mature spinsters are many with respect to the qualities
> of ground - they even inspire useless software as crutches. I have
> seen NO ONE here who can recommend it (much less admit they don't even
> have a clue on what values would be appropriate for their own locale).
> Hence most discussion is either faith-driven, speculation, or simple
> hucksterism.

Good Sir,

A bit of a disconnect appears to occur in the above two clips between your stated desire to avoid bad manners, and the consistency with which you do it. Most people are more willing to entertain another's point of view if such is given without hostility and intimidation.

With all due respect,

RF

2797. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 20:28:58 UTC
From: ku4yp <ku4yp@verizon.net>
Message-ID: <eAp_c.1540$PK3.171@trnddc08>
Source record: 90018

i thank you all for the comments.

to tie into the electirical service will be a pain as the electrical
gound is on the total oposite end of the house from the shack. i'll have to
work something out there. water pipe grounding will not be a problem.

i can see i have much more reading to do.

thanks agian, mike

--
73 de KU4YP "A clean ham shack is the
Mike Prevatt sign of a sick mind....."
Advanced Operator
Bartow, Florida Active HF/VHF/Digital
"Dave" <noone@nowhere.com> wrote in message
news:gsWdnewCLv1lJaTcRVn-oA@crocker.com...
> 'as short as possible' it the important phrase. its not always possible
to
> keep it really short. another important part is keeping it as fat as
> possible, meaning use heavy wire or, even better, something like copper
> flashing, aluminum flashing or angle stock, or something like that.
aluminum
> angle stock that you find in 6-8' lengths in hardware stores makes
excellent
> ground busses, its easily drilled for connections to equipment, can be
> easily bolted together at corners, and makes a nice neat installtion...
use
> the 1" or wider stuff if you can get it. do not use multiple ground rods
> unless you also connect them all together outside... and if you do drive a
> 'station' ground rod be sure it is also connected outside with heavy
> conductor to your existing power entrance ground. and while you are at it
> make sure the power entrance is also connected to your water pipe coming
in,
> pool filter ground, outdoor light ground, and anything else grounded
outside
> the house.
>
> "ku4yp" <ku4yp@verizon.net> wrote in message
> news:599_c.677$Va5.488@trnddc01...
> > i have a question.
> >
> > in reference to station grounding, i have read keep the grounding
> strap
> > as short as possible and not a multiple of a resonant length on the ham

> > bands. with that in mind, even if i ground pieces of equipment to
> individual
> > ground rods, won't the complete grounding system be long? in my mind i
am
> > looking around the room and seeing a grounding system being at least 12
> feet
> > long, if i go along the perimeter of the desks (which are in a "U" shape
> in
> > the room.
> >
> > trying to grasp this in a practical sense. sorry if it is basic and
i
> am
> > just not understanding it.
> >
> > not responsible for spelling. :-) any input on this would be most
> > appreciated.
> >
> > --
> > 73 de KU4YP "A clean ham shack is the
> > Mike Prevatt sign of a sick mind....."
> > Advanced Operator
> > Bartow, Florida Active HF/VHF/Digital
> >
> >
>
>

2798. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 20:40:46 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <credncaxBbfUtafcRVn-qw@comcast.com>
Source record: 90019

"Walter Maxwell" <w2du@iag.net> wrote in message
news:90lhj0tnsuh631kmq5epoq9m76kfi9fpg9@4ax.com...
> On Fri, 3 Sep 2004 17:16:48 -0300, "Another Voice" <No_Spam@Hotmail.com>
wrote:
>
> >**** Post for FREE via your newsreader at post.usenet.com ****
> >
> >"Richard Harrison"
> >> Just how short can a transmission line be
> >> and still enforce its Zo?
> >
> >The whole thing is perfectly clear if one imagines applying a step
function
> >(rising edge) to any short, even VERY short, length of transmission line.
> >The current in the short line will be equal to V/Zo - at least until the
> >reflections (if any) start arriving back at the input. If the line
happen
> >to be terminated with Zo, then no reflections and I=V/Zo is the steady
> >state.
> >
> >The only issue of shortness is that a very short line means very short
time
> >until the reflections arrive.
> >
> >The step function makes things a lot easier to understand than RF. It
> >'enforces' the distinction between the transient period and steady state.
> >
> IMO, the length of the line is irrelevant when using a device such as the
Bruene
> bridge or a Bird 43. Each of those instruments are designed or adjusted to
> indicate the forward or reflected power, based on three things: 1) ratio
of the
> foward and reflected voltages, the voltage reflection coefficient 2) the
scale
> numbered from 0 to 1, where 0 indicates the reflection is zero, and 1
equals
> total reflection, but the significant point is that a 3:1 mismatch gives a
> reflection coefficient of 0.5, which then means that the half-scale
reading of
> 0.5 indicates the 3:1 mismatch, or a 3:1 SWR, and 3) the device is so
designed
> or adjusted so that the voltage ratios indicate the correct value because
it's
> inherent characteristic impedance, Zo, is 50 ohms.

>
> Thus, no transmission line is necessary. For example, the device can be
> connected directly to the antenna terminals, or any other device you
desire to
> determine the mismatch, and power it directly from the signal source--no
> transmission line is needed on either port for the device to indicate the
degree
> of mismatch.
>
> Walt, W2DU

Walt,

I hope people are listening to what you are saying. I built up a Bruene meter in SWCAD using 0% tolerance components and other ideal parts. Works exactly like Bird claims their meter does, except that the error only depends on the PC floating point arithmetic. Transmission line or not makes no difference. BTW, it is kind of neat to see the directional coupler properties, by driving the two sides with different signals, and then being able to separate them.

Tam/WB2TT

2799. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:12:22 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10jkbrd8i978qe8@corp.supernews.com>
Source record: 90020

Dear Ken: The wire loops overlap. The insulator is in compression not
tension. If the insulator breaks, the wire is still, sort of, supported.
The "egg" insulators that I have used did not have a groove that went
all of the way around.
For reference: about how large are your insulators?
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Ken" <cprstn54zz@att.net> wrote in message
news:73fjj09bk8qu0ckiadsr3gfo9r0ejmdqct@4ax.com...
> I just picked up some small egg insulators and have a question.
>
> I had assumed that the wire went through the hole, was routed back in
> the groove to the far end of the insulator, and was twisted back on
> the standing part. The two loops overlap, as it were. However, the
> groove for the wire continues all around the egg, including the near
> end of the insulator opposite the standing part. This suggests some
> kind of fancy wire routing is expected.
>
> How come they continue the groove all around? Do these sometimes get
> used with the insulator in tension and the loops not overlapping?
>
> Ken KC2JDY
>
>
> Ken
> (to reply via email
> remove "zz" from address)

2800. Real antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:22:00 UTC
From: Richard <translations@qdnet.pl>
Message-ID: <chdbvv$n7d$1@atlantis.news.tpi.pl>
Source record: 89921

The sort that even the "big guns" dream about

http://www.antenna.be/

Rgds
Richard SO5GB

2801. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:44:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jkdp96ap1u960@corp.supernews.com>
Source record: 89922

Sorry, I must have misinterpreted your earlier posting.

But we seem to now have a "true SWR" as opposed to some other kind of SWR. And "true SWR connected to the tx output" doesn't have any meaning at all to me. I also have no idea of what "sample points within the transmitter" might be. So let me explain what I (and virtually all published literature) mean by SWR.

If we connect a transmitter to an SWR meter, and then to a long piece of lossless cable with the same Z0 as the SWR meter, and finally to a load, the SWR meter reading will be the same as the VSWR on the cable, i.e., the ratio of maximum to minimum voltages on the line. This ratio of voltages is, by definition, the VSWR -- which equals the ISWR, and is often referred to simply as SWR.

If we measure or calculate the impedance seen looking into the line, then disconnect the line from the SWR meter and replace it and the load with lumped elements of the same impedance, the SWR meter reading won't change(*).

Now, I can calculate the what the SWR meter reading will be under this condition also. In both cases, the source impedance won't affect the SWR meter reading, the positions or relative magnitudes of the maximum and minimum voltages on the line, or the voltage or current within the SWR meter line section. (This last condition assumes that the net power delivered by the source stays the same; otherwise, the ratio of voltage to current, and their phase angles, stay constant, regardless of the power delivered.)

I have no idea how all this relates to your "true SWR". But do you agree with what I've said above? If not, I'll describe a couple of simple experiments which will test it against any alternative view you might propose.

(*) We can also replace them with a load at the end of a line of different Z0. As long as we choose the load Z and the line length to make the impedance seen at the line input the same as before, the SWR meter will read the same as before -- even though it no longer equals the actual VSWR on the transmission line. The SWR meter is really indicating the impedance seen looking into the line, not in this case the actual line VSWR. (That's the essence of Reg's objection to the SWR meter designation. Of course, if I connect my ammeter across a resistor, it's not measuring the current through the resistor, either.)

Roy Lewallen, W7EL

Richard Fry wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote
>
>>Let me suggest an additional exercise for Richard and anyone else that
>>believes that source impedance affects the SWR. (etc)
>
> ____________________
>
> Just one sec, please. I didn't say that the true SWR connected to the tx
> output connector was affected. I said that the RF power measured at the
> sample point(s) in the transmitter can be affected by the source and load
> impedances of the tx, for the reasons stated.
>
> The true load SWR does not change under these conditions, but it cannot then
> be determined by such a meter. Attempting to do so will yield some value,
> but it will be wrong.
>
> RF
>
>

2802. Re: How to measure SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:50:38 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chddbe$au5$1@titan.btinternet.com>
Source record: 89923

> Ian White, G3SEK wrote:
>
> > Reg Edwards wrote:
> >
> >> For those who have forgotten how or have never measured SWR.
> >>
> >
> > Hang on, Reg - didn't you spend your career working on VLF cables that
> > went under the ocean?
> >
>
> How did you keep the water out of the slotted cable? And how far did you
> have to swim between Vmax and Vmin?
>
> Roy Lewallen, W7EL
==========

Water can be kept out of slotted cables by the ship's radio operator who never has anything else to do. We used to toss him overboard with a ladle and pump. On occasions we used the ship's doctor when he wasn't propping up the bar boozing duty-free scotch.

Didn't have to swim anywhere. The propagation velocity is so low at ELF in sea water it is necessary only to sit on a stool in a diving suit and wait for the max's and min's to pass by.

Reg.

2803. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:54:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5mtjj01rc8785ooh3ooaga39e59nakev4b@4ax.com>
Source record: 89924

On Sat, 04 Sep 2004 08:23:05 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:

>But I can tell you that if I calibrate a high-quality network analyzer
>using a 50 ohm generator and then add a tee and second 50 ohm load to
>the generator output, making it a 2:1 mismatched source, there will be
>*no* significant change in the answer presented when typical
>mismatches are measured.
>

Hi Wes,

To offer some numbers in regard to the Mismatch Uncertainty to show
the insignificance in relation to common experience.

A 2:1 mismatched source feeding a 2:1 mismatched load injects (by the
graph) about +25% to -20% range of uncertainty. To amateur standards
of measurement, about the best they could do anyway, and generally
accepted with complacency as "perfect."

There is a very simple relation for finding this range of uncertainty:

1 / (1 ï¿½ |G1|ï¿½|G2|)ï¿½
where
|G| = (SWR - 1) / (SWR +1)
or for both SWRs at 2:1
|G| = 0.333
and
1 / (1+ 0.111)ï¿½ = 0.81
and
1 / (1 - 0.111)ï¿½ = 1.27

If we repeat this exercise with more radical 3:1 mismatches on either
side of the SWR meter, then the range of uncertainty becomes:
1 / (1+ 0.25)ï¿½ = 0.64
and
1 / (1 - 0.25)ï¿½ = 1.78
or roughly -40% to + 80% error.

Now, given few (if any) amateur transmitters (of the transistor
persuasion) exhibit even as much as 2:1 mismatch at their port to a 50
Ohm load; then it is reasonable to presume the range of error is not
as outrageous (insignificant to pedestrian accuracy).

However (the part I enjoy), for those who persist in maintaining their
transmitters (of the transistor persuasion) do NOT exhibit anything
close to 50 Ohms; then they have no business discussing power levels

into mismatches except as an expression of fantasy.

To date in this matter, I have yet to see any concrete value of source Z offered from those of the NOT 50 Ohms camp. Further, I have yet to see any of them offer any experimental confirmation of their assertion (made rather simple by the exhibition of uncertainty). I have offered several means to accomplish this confirmation. I have even offered data from actual tests that exhibits this confirmation. I have even offered references that speak directly to this uncertainty. But I do admit from one retort "you are not going to change my mind" that such impeccable logic will always prevail. :-)

73's
Richard Clark, KB7QHC

2804. horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:57:09 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10jkehojcaol9bd@corp.supernews.com>
Source record: 89925

Greetings to all the antenna experts here!

I want to create horizontally polarized antenna, low profile, located above large ground plane. And I need it to be omnidirectional (sort of) and have sufficient gain in horizontal plane.

My frequency of interest is 900 MHz. The ground plane is a roof of a car.

I tried loops, from 50 to 300 mm diameter, radiation goes up if I mount it above the ground plane.

Any ideas?

Thank you,

Andrey

2805. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 21:58:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0cekj0lqpcm7ek19sm3mtfmide200ove35@4ax.com>
Source record: 89926

On Sat, 04 Sep 2004 19:55:48 GMT, "GW" <look@signature_to.reply>
wrote:

>This would require the surface to be a good
>conductor to be a good reflector.

Hi OM,

Replace any low Ohm plane with a hi Ohm plane. No conduction issues
(or even vastly worse than salt water) there at all, same reflection -
n'est pas?

For those who've studied freshman Physics, this is called Snell's Law.

73's
Richard Clark, KB7QHC

2806. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 22:35:08 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2puu8qFpn5v5U1@uni-berlin.de>
Source record: 89927

"Roy Lewallen" <w7el@eznec.com> wrote
>
>But we seem to now have a "true SWR" as opposed to
>some other kind of SWR. And "true SWR connected to
>the tx output" doesn't have any meaning at all to me.

My "true SWR" term is used is an attempt to differentiate between the SWR of the antenna system, and the inaccuracies associated with trying to measure it with devices that cannot isolate the incident power in the system from internal reflections of that power. For the conditions and reasoning outlined in my earlier posts in this thread, and even though the system SWR is a constant -- the normal SWR meter used in/with an operating transmitter working into a mismatched load won't have the ability to give strictly accurate measurement of that SWR. That is all I'm saying.

> I also have no idea of what "sample points within the
> transmitter" might be.

In broadcast gear, these are the directional couplers whose pickup probes are inserted transversely into the coaxial line between the harmonic filter output and the tx output connector. I haven't been a licensed ham for over 40 years (when I went into the broadcast field), but I expect some ham txs might have the same setup. Otherwise it could be a Model 43 or the like inserted between the output connector of the ham tx and the transmission line to the antenna.

I hope this is understandable now.

RF

2807. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 22:54:55 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <zJ9QCeekOBFA5U@ifwtech.co.uk>
Source record: 89930

Richard Fry wrote:

> Ian White wrote:
>> The so-called SWR meter is a steady-state instrument, so it always makes
>> sense to use that quicker, easier way of thinking. Since you're the one
>> who chooses to think of this particular situation in terms of multiple
>> reflections, any difficulties you encounter are entirely yours.
>
>This reads to me as though you know they are there, but choose to
>ignore them...?

Oh no, quite the opposite - but since these difficulties are entirely of
your own making, you get to do the work :-)

>> If you ever see a conflict between two different theories that explain
>> the same observed facts, then there's an error somewhere.
>
>We agree on the subject of conflict resolution, but apparently not on
>the location of the error.
>
Thank you for the more detailed explanation below... which, sure enough,
revealed where the error is.

>> If the multiple-reflection theory is extrapolated to infinite time, so
>>that it calculates results for the steady state, it *must* give identical
>> results to the steady-state theory. But whenever the steady-state
>> theory can be used, it will always get you there much more quickly.
>
>This is true only to the extent that all the power ever generated by
>the transmitter eventually either is radiated by the antenna or is
>dissipated by losses somewhere.
>
That is exactly true in the steady state.

>For simplicity, let's assume a tx with a source impedance of zero ohms
>feeds a lossless transmission line of uniform impedance throughout its
>length to a mismatch at the far end. The mismatch reflects a
>percentage of the incident power back down the line to the tx, and
>continues to do so as long as the transmitter generates power. The tx
>will re-reflect the reflected power back to the far end -- in this case
>all of the reflected power it ever sees, in fact. To this easily-seen,
>real-world reality you agreed above ("Yes, that is a true observation, ...").
>
>The re-reflections combine with the power generated by the tx at that
>instant to create a vector sum at the sample point used by the meter.

There's the error: you can't "combine... power" in that way. You can only create vector sums of voltage; and separately, vector sums of current.

To make the multiple-reflection theory work correctly, you have to do two separate vector sums at output port of the transmitter. First you add all the voltage vectors: the 1st (original) forward, the 1st reflected, the 2nd forward (re-reflected), 2nd reflected... and so on, summed to infinity to give the correct result for the steady state. Then you do the exactly same for all the forward and reflected current vectors.

In order to account for reflection from the transmitter, you have to assume some value of source impedance. Any value will do, for reasons we'll see in a moment.

Now you can calculate two things: the vector ratio, which is the complex impedance that the transmitter sees as a load; and the scalar product, which is the power the transmitter can deliver into that load.

If you vary the source impedance of the transmitter, it will change all the summed voltage vectors and all the summed current vectors - but each voltage term in the sum will be changed by exactly the same factor as its corresponding current term. Certainly the product (the output power) will change, but the ratio (the load impedance) will not.

So, when correctly worked out, the load impedance is *not* a function of the transmitter output impedance or the output power. Likewise, the indication of the SWR meter is not a function of either the transmitter output impedance or the output power - this last one being a well-known fact.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2808. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 22:56:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chdh6cndt1@sparta.btinternet.com>
Source record: 89928

You all seem to have forgotten the very high permittivity of water. Does this not affect reflectivity? A question for Cecil?

2809. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 22:57:26 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2puvikFp7rl2U1@uni-berlin.de>
Source record: 89929

"Richard Clark" wrote
> To date in this matter, I have yet to see any concrete value of source
> Z offered from those of the NOT 50 Ohms camp. Further, I have yet to
> see any of them offer any experimental confirmation of their assertion

---

Please see the following. In the quote there, note the text starting "The transmitter's output source impedance must be low...", and the following sentences.

+ + +

Below is a quote from a paper titled "A Study of RF Intermodulation Between FM Broadcast Transmitters Sharing Filterplexed or Co-located Antenna Systems," by Geoffrey Mendenhall. Mendenhall is a registered professional engineer, and now a VP for Harris Broadcast Division in Mason, OH. He is responsible for the engineering research and design of the entire broadcast transmitter product line for Harris: AM, FM & TV. Harris is the world's largest supplier of broadcast transmitters.

This paper and quote has to be read here with some interpretation, because it is an analysis of what happens when an in-band signal from one transmitter is coupled into another transmitter when their antennas are close together and/or when adequate filtering of the external signal is not provided. But it is strictly applicable also for single tx and antenna systems, where an antenna mismatch produces reflections back toward the transmitter. In this case the "interfering signal" is not external, but a reflection of the incident power of that tx.

QUOTE: Output return loss is a measure of the interfering signal that is coupled into the output circuit versus the amount that is reflected back from the output circuit without interacting with the non-linear device. To understand this concept more clearly, we must remember that although the output circuit of the transmitter is designed to work into a fifty ohm load, the output source impedance of the transmitter is not fifty ohms. If the source impedance were equal to the fifty ohm line impedance, half of the transmitter's output power would be dissipated in its internal output source impedance. The transmitter's output source impedance must be low compared to the load impedance in order to achieve good efficiency. The transmitter therefore looks like a voltage source driving a fifty ohm load. While the transmission line is correctly terminated looking toward the antenna (high return loss), the transmission line is greatly mismatched looking toward the output circuit of the transmitter (low return loss). This means that power coming out of the transmitter is completely absorbed by the load while interfering signals fed into the transmitter are almost completely reflected by the output circuit. END QUOTE

The transmitter topology in this study was a single PA tube operating Class C. For these designs, an on-carrier return loss value of 2 dB or less is rather common. At 2 dB the reflection coefficient is over 79%.

PAs comprised of multiple devices combined by balanced methods (e.g. 3dB hybrids, Wilkinsons) can provide a source impedance closer to 50 ohms (higher return loss). In these cases, power that is reflected off the load and NOT re-reflected by the tx mostly is dissipated in resistive networks in the PA combiner. However these networks do not provide a load for the forward power from the tx, only for power reflected by the output termination.

RF

Visit http://rfry.org for FM broadcast RF system papers.

2810. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:00:08 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jki7p1v0r22e9@corp.supernews.com>
Source record: 89931

Sorry, it still isn't clear.

Richard Fry wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote
>
>>But we seem to now have a "true SWR" as opposed to
>>some other kind of SWR. And "true SWR connected to
>>the tx output" doesn't have any meaning at all to me.
>
>
> My "true SWR" term is used is an attempt to differentiate between the SWR of
> the antenna system, and the inaccuracies associated with trying to measure
> it with devices that cannot isolate the incident power in the system from
> internal reflections of that power. For the conditions and reasoning
> outlined in my earlier posts in this thread, and even though the system SWR
> is a constant -- the normal SWR meter used in/with an operating transmitter
> working into a mismatched load won't have the ability to give strictly
> accurate measurement of that SWR. That is all I'm saying.

What, then, is "system SWR"? How do you define it?

>
>>I also have no idea of what "sample points within the
>>transmitter" might be.
>
>
> In broadcast gear, these are the directional couplers whose pickup probes
> are inserted transversely into the coaxial line between the harmonic filter
> output and the tx output connector. I haven't been a licensed ham for over
> 40 years (when I went into the broadcast field), but I expect some ham txs
> might have the same setup. Otherwise it could be a Model 43 or the like
> inserted between the output connector of the ham tx and the transmission
> line to the antenna.

In your last posting, you said,

> Just one sec, please. I didn't say that the true SWR connected to the
> tx output connector was affected. I said that the RF power measured
> at the sample point(s) in the transmitter can be affected by the
> source and load impedances of the tx, for the reasons stated.

So replacing "sample point(s) in the transmitter" with "Model 43 or the
like inserted between the output connector of the ham tx and the
transmission line to the antenna", you've said that the RF power
measured by the (model 43) SWR meter can be affected by the source
impedance of the transmitter.

Obviously, if we have a voltage or current source of fixed value and change the source impedance, the power delivered by the source changes, and any means of measuring the power at the source, load, or in between should show that change. That follows from elementary circuit theory, and doesn't require any consideration or knowledge of transmission lines, waves, or SWR. On the model 43, both the "forward" and "reverse" powers will change, but by the same fraction. Perhaps that's what you mean. But if you mean that the SWR reading or the ratio of "forward" to "reverse" power changes as a result of changing the source impedance, that's easily shown to be false by the simple experiment I proposed.

> I hope this is understandable now.
>
Almost, but not quite.

2811. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:33:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <emjkj0lrjv1f430h7lcsjlis2rljkihabh@4ax.com>
Source record: 89932

>On Sat, 04 Sep 2004 17:04:49 GMT, Richard Clark <kb7qhc@comcast.net> wrote:
>
>>(and it is the molecular polarization and
>>relaxation moment that causes this, not conductivity)
On Sat, 4 Sep 2004 22:56:12 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>You all seem to have forgotten the very high permittivity of water. Does
>this not affect reflectivity? A question for Cecil?
>

Ah Punchinello!

Clowning as ever, I see. A seque from the world's worst conductor to
the world's worst dielectric? This is the price of superlatives in
place of engineering specifics. Whatsamatta, did you defrock your
saint Kelvin?

What is the loss tangent of the mud in your garden Reggie? ;-)

Well, anticipating your typical loss for a response, and for others, a
nice round value of 1 is easily within rough accuracy. Corrections
(not speculations) are encouraged. Be specific.

73's
Richard Clark, KB7QHC

2812. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:44:04 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <8rs_c.29627$3l3.11661@attbi_s03>
Source record: 89933

ku4yp wrote:
> i have a question.
>
> in reference to station grounding, i have read keep the grounding strap
> as short as possible and not a multiple of a resonant length on the ham
> bands. with that in mind, even if i ground pieces of equipment to individual
> ground rods, won't the complete grounding system be long? in my mind i am
> looking around the room and seeing a grounding system being at least 12 feet
> long, if i go along the perimeter of the desks (which are in a "U" shape in
> the room.

W1MCE replies:

I have used a 1/2 inch copper pipe mounted along the back edge of the table[s] holding my station equipment.

The case of each piece of equipment is connected directly to the copper pipe using 1 inch braided strap about 6 to 12 inches long depending on equipment size. This pipe provides an equipotential plane for all my equipment. [Another method would be to install a thin copper sheath on top of your desk/tables and connect directly to it for the equipotential plane.]

Now, how to connect the equipotential plane to brown dirt [earth] is the next issue. You are correct that it is desirable to keep this 'non-resonant' on the bands you operate. There are two issues here that need to be addressed. First, if you are close to the earth ground then a simple #6 AWG wire to a ground rod is adequate. Second, if you are higher than 1/4 wavelength at the highest frequency of interest use two #6 AWG wires OF DIFFERENT LENGTHS, not harmonically related, connected to the ground rod. The different lengths assure that the equivalent connection is NOT RESONANT.

In very fortunate cases an additional station ground is not required! Believe it or not! ... My station is located on the ground floor in the family [my] TV room right under the electrical distribution panel. My 120 VAC line comes directly from the service entrance through about 3 feet of wire. The 240 VAC for my amplifier comes directly from the service entrance through 4 feet of wire. The service box is 'earthed' by a NEC compliant connection. My connections to the service box are therefore very short.

A major point of caution is required. The NEC requires ONLY ONE ground connection. Multiple ground connections introduce VERY SERIOUS ground loops that may violate the NEC criteria. This opens a VERY LARGE loop hole in your home owner's insurance policy. If you are adding a second

earth [ground] connection at your station use an isolation transformer to break up the ground loops in the basic 120 VAC connection. Consult with an electrician regarding your local and NEC codes.

It is noted that station grounding and antenna counterpoise construction are two different things. I am not addressing the counterpoise issue.

2813. Re: Real antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:48:02 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <Sus_c.15946$Wo6.11299@newssvr29.news.prodigy.com>
Source record: 89936

Richard wrote:

> The sort that even the "big guns" dream about
>
> http://www.antenna.be/
>
> Rgds
> Richard SO5GB
>
>

One DONT see listed is the (actually there are 2 of em!) Over-the Horizion radar antennas constructed about 30 miles south of Tule Lake , Ca, and looks to be about 20 MHz freq wise! Tho shut down, these are still mothballed, and are about 3/4 MILE LONG array of Rohn tower sections, every (again, as observed, not measured-- Wackenhut the security outfit, would NOT be amused if CLOSELY inspected!) , spaced about every 15-20 feet, this on a surface of chicken wire/ fenceing material , on the ground surface, about 800 - 1000 foot deep, and, a backstop, again guetimate, , about 10-15 foot high! aimed at Russia! Would be interesting to try one of these out, sometime (Work all Oblisks, QRP??) sometime, but, might not have the military very happy with you !! Jim NN7K

2814. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:49:53 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <Bws_c.372772$%_6.370135@attbi_s01>
Source record: 89934

The loops are supposed to overlap!!! In the event of a broken insulator
the antenna is still suspended and not on the ground!!

For a successful installation use wire for the antenna [of course] and
antenna rope for the connection to the supporting end. If the insulator
breaks, your antenna is still 100% operable.

J. Mc Laughlin wrote:

> Dear Ken: The wire loops overlap. The insulator is in compression not
> tension. If the insulator breaks, the wire is still, sort of, supported.
> The "egg" insulators that I have used did not have a groove that went
> all of the way around.
> For reference: about how large are your insulators?
> 73 Mac N8TT
>
> --
> J. Mc Laughlin; Michigan U.S.A.
> Home: JCM@Power-Net.Net
> "Ken" <cprstn54zz@att.net> wrote in message
> news:73fjj09bk8qu0ckiadsr3gfo9r0ejmdqct@4ax.com...
>
>>I just picked up some small egg insulators and have a question.
>>
>>I had assumed that the wire went through the hole, was routed back in
>>the groove to the far end of the insulator, and was twisted back on
>>the standing part. The two loops overlap, as it were. However, the
>>groove for the wire continues all around the egg, including the near
>>end of the insulator opposite the standing part. This suggests some
>>kind of fancy wire routing is expected.
>>
>>How come they continue the groove all around? Do these sometimes get
>>used with the insulator in tension and the loops not overlapping?
>>
>>Ken KC2JDY
>>
>>
>>Ken
>>(to reply via email
>>remove "zz" from address)
>
>
>

2815. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:50:07 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <xM2dnfkuT8A0yafcRVn-vQ@comcast.com>
Source record: 89935

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10jk4b57htjhd4c@corp.supernews.com...
> This has been explained many times, to no avail.
>
> So instead of one of us explaining it yet again, I suggest that you do
> the following experiment. It requires only a transmitter, one or two
> dummy loads, an SWR meter, and no more than five minutes of your time.
>
> 1. Connect the transmitter to either a dummy load or an antenna through
> the SWR meter and measure the SWR.
>
> 2. Connect the transmitter in parallel with a dummy load by using a tee
> connector. Connect this parallel combination to the input of the SWR
> meter, and the output of the SWR meter to the same load as before (dummy
> load or antenna).

If you don't have 2 dummy loads, there is a simple alternative. Connect the TX to the meter through a 1/4 wave section of 75 Ohm line. Unless the TX output was 75 Ohms, the equivalent TX output impedance seen by the meter has changed.

Tam/WB2TT
>
> Do you see any change in the SWR?
>
> If you don't, then something is wrong with your theory -- since the
> source impedance is clearly different for the two measurements --, and
> you should take the effort of resolving it with your recent observations.
>
> Roy Lewallen, W7EL
>
> Richard Fry wrote:
> > "Ian White, G3SEK"wrote:
> >
> >>Richard Fry wrote:
> >>
> >>>"Ian White, G3SEK wrote
> >>>
> >>>The meter measures nothing that involves the source, except
> >>>the level of RF that it supplies. It does not respond in any way
> >>>whatever to the source impedance.
> >>>
> >>>Not that I said it did in my part of the thread, but nevertheless the
> >>
> > above

> >
> >>>statement is not strictly true. In the case where the source Z of the
tx
> >
> > PA
> >
> >>>does not match its load Z (which is typical), power reflected from the
> >
> > load
> >
> >>>mismatch will at least partly be re-reflected from the PA -- which then
> >>>contributes to the power sensed by a "wattmeter" in the output path.
> >>
> >>Sorry, that statement cannot be correct. It would mean that the
> >>impedance you measure at the near end of a transmission line (terminated
> >>by some arbitrary load at the far end) would depend on the internal
> >>impedance of the device that's doing the measuring - and that is not
> >>true, either in transmission-line theory or in the real world. It is a
> >>function only of the line and the load. etc
> >
> > ____________
> >
> > How, then, do you explain the "ghost image" that can occur* in
analog(ue) TV
> > transmission systems arising from reflections at/near the antenna end of
the
> > station's transmission line?
> >
> > *with sufficient round-trip propagation time in the transmission line
> >
> > RF
> >
> >

2816. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:58:44 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <2qjkj0p95125qkm9ecm77v4n9jiof4vn4i@4ax.com>
Source record: 89937

On Sat, 4 Sep 2004 17:57:26 -0500, "Richard Fry" <rfry@adams.net> wrote:

>"Richard Clark" wrote
>> To date in this matter, I have yet to see any concrete value of source
>> Z offered from those of the NOT 50 Ohms camp. Further, I have yet to
>> see any of them offer any experimental confirmation of their assertion
>_____________
>
>Please see the following. In the quote there, note the text starting "The
>transmitter's output source impedance must be low...", and the following
>sentences.
>
>+ + +
>
>Below is a quote from a paper titled "A Study of RF Intermodulation Between
>FM Broadcast Transmitters Sharing Filterplexed or Co-located Antenna
>Systems," by Geoffrey Mendenhall. Mendenhall is a registered professional
>engineer, and now a VP for Harris Broadcast Division in Mason, OH. He is
>responsible for the engineering research and design of the entire broadcast
>transmitter product line for Harris: AM, FM & TV. Harris is the world's
>largest supplier of broadcast transmitters.
>
>This paper and quote has to be read here with some interpretation, because
>it is an analysis of what happens when an in-band signal from one
>transmitter is coupled into another transmitter when their antennas are
>close together and/or when adequate filtering of the external signal is not
>provided. But it is strictly applicable also for single tx and antenna
>systems, where an antenna mismatch produces reflections back toward the
>transmitter. In this case the "interfering signal" is not external, but a
>reflection of the incident power of that tx.

A critical point made in the quote below is evidence of a serious
misunderstanding concerning the relationship between the source impedance of the
tx and the load impedance.

>QUOTE: Output return loss is a measure of the interfering signal that is
>coupled into the output circuit versus the amount that is reflected back
>from the output circuit without interacting with the non-linear device. To
>understand this concept more clearly, we must remember that although the
>output circuit of the transmitter is designed to work into a fifty ohm load,
>the output source impedance of the transmitter is not fifty ohms. If the
>source impedance were equal to the fifty ohm line impedance, half of the
>transmitter's output power would be dissipated in its internal output source
>impedance.

The last sentence in the paragraph above is incorrect. This shows that the writer of the quote is in the unbelievably large group that still believes incorrectly that half of the tx power would be lost if if it were conjugately matched. But we all know that efficiencies greater than 80% is achieved by Class C amps, and greater than 60% is achieved by Class B amps when the source impedance of the tx is 50 ohms resistive and the load impedance is also 50 ohms resistive.

I have made appropriate measurements in a professional RF laboratory that prove this point. The data from these measurements and the procedure used is available for downloading from my web site at http://home.iag.net/~w2du under the title "On the Nature of the Source of Power in Class B and C Amplifiers." This piece is Chapter 19 in Reflections II, and also appears in QEX,, May/Jun 2001.

Unfortunately, like the statement made in the 'quote' above, there are all too many RF engineers who fail to appreciate the true relationship between the two separate resistances in the amp, the resistance resulting in dissipation and the resistance responsible for delivering the power to the load. I guarantee the reader of the piece referenced above will come away with something to think about.

>The transmitter's output source impedance must be low compared
>to the load impedance in order to achieve good efficiency. The transmitter
>therefore looks like a voltage source driving a fifty ohm load. While the
>transmission line is correctly terminated looking toward the antenna (high
>return loss), the transmission line is greatly mismatched looking toward the
>output circuit of the transmitter (low return loss). This means that power
>coming out of the transmitter is completely absorbed by the load while
>interfering signals fed into the transmitter are almost completely reflected
>by the output circuit. END QUOTE
>
>The transmitter topology in this study was a single PA tube operating Class
>C. For these designs, an on-carrier return loss value of 2 dB or less is
>rather common. At 2 dB the reflection coefficient is over 79%.
>
>snip
>RF
>
73,

Walt, W2DU

2817. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-04 23:59:24 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <ptkkj0p0i3duva63n5vn594dla731iqeca@4ax.com>
Source record: 89938

On Sat, 4 Sep 2004 14:46:38 -0500, "Richard Fry" <rfry@adams.net>
wrote:

|"Roy Lewallen" <w7el@eznec.com> wrote
|> Let me suggest an additional exercise for Richard and anyone else that
|> believes that source impedance affects the SWR. (etc)
|_____________________
|
|Just one sec, please. I didn't say that the true SWR connected to the tx
|output connector was affected. I said that the RF power measured at the
|sample point(s) in the transmitter can be affected by the source and load
|impedances of the tx, for the reasons stated.

Not so fast yourself. You said, "The generic function of this meter is
to measure the degree of match between a source and a load."

There is no power mentioned in your statement. I, and others, stated
that your first statement was incorrect and since that time you have
been introducing prodigious amounts of verbiage in an attempt to
obfuscate and avoid the obvious error in your earlier statement.

Just slap your forehead and say, "Shucks, I blew it with that one" and
we can all forget about it. I do it all of the time.

|
|The true load SWR does not change under these conditions, but it cannot then
|be determined by such a meter. Attempting to do so will yield some value,
|but it will be wrong.

Oh please. If an SWR meter, direction bridge, TLI or whatever you
want to call it has decent directivity, i.e. the ability to discern
forward and reflected power, forward and reflected waves, reflection
coefficient, scattering parameters, or whatever you want to call them,
then the applied power is immaterial.

We are trying to measure a RATIO, not some absolute value of power.

2818. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 00:02:26 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <mIs_c.2344$vl2.712@trnddc02>
Source record: 89939

"Bill Turner" <noway@nohow.com> wrote in message
news:rohkj0pgas2rhcqb7iu530g22ttfkv9mjv@4ax.com...
> On Sat, 4 Sep 2004 14:57:09 -0700, "Andrey" <a8421@intergate.bc.ca>
> wrote:
>
> >Greetings to all the antenna experts here!
> >I want to create horizontally polarized antenna, low profile, located
above
> >large ground plane. And I need it to be omnidirectional (sort of) and
have
> >sufficient gain in horizontal plane.
> >My frequency of interest is 900 MHz. The ground plane is a roof of a car.
> >I tried loops, from 50 to 300 mm diameter, radiation goes up if I mount
it
> >above the ground plane.
> >Any ideas?
> >Thank you,
> >Andrey
>
> --
>
> FWIW, horizontal polarization at 900 MHz won't get you far. Vertical is
> preferred because horizontal is rapidly absorbed by ground loss. On the
> other hand, if you don't *want* to get very far, use a vertical and just
> reduce power.
>This will be sad news to all the V/U weak signal ops who have consistantly
covered long distances using horizontal polarity.

Dale W4OP

2819. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 01:09:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chdovnolc1@titan.btinternet.com>
Source record: 89940

"Roy Lewallen" wrote
>
> If we connect a transmitter to an SWR meter, and then to a long piece of
> lossless cable with the same Z0 as the SWR meter, and finally to a load,
> the SWR meter reading will be the same as the VSWR on the cable, i.e.,
> the ratio of maximum to minimum voltages on the line.

==========

It is at this point where impressionable novices are led astray by old wives, never again to return to logical thought on the subject.

They imagine that because the meter happens to indicate the swr on the line, the meter is actually responding to the swr on it. Whereas the meter is actually responding to the modulus of the reflection coefficient caused by the line's input impedance regardless of what its Zo may be. The act of making the line's Zo and the meter's resistance both equal to the transmitter's designed-for load resistance, has put additional infomation into the system. Cooking the books!

If there's an SWR to be indicated it is on a long line between meter and the transmitter. In the absence of such a line the meter wastefully discards half of the information it is presented with and indicates the modulus of the reflection cofficient. A more appropriate name is TLI.

Reg, G4FGQ

2820. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 01:20:31 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10jkqire8i5j2b2@corp.supernews.com>
Source record: 89941

Dave
Some ceramic insulators are made both ways for simplicity.
Guy wire insulators should overlap; Antenna insulators shouldn't.
H.

"Dave Shrader" <david.shrader@comcast.net> wrote in message
news:Bws_c.372772$%_6.370135@attbi_s01...
> The loops are supposed to overlap!!! In the event of a broken insulator
> the antenna is still suspended and not on the ground!!
>
> For a successful installation use wire for the antenna [of course] and
> antenna rope for the connection to the supporting end. If the insulator
> breaks, your antenna is still 100% operable.
>
> J. Mc Laughlin wrote:
>
> > Dear Ken: The wire loops overlap. The insulator is in compression not
> > tension. If the insulator breaks, the wire is still, sort of,
supported.
> > The "egg" insulators that I have used did not have a groove that
went
> > all of the way around.
> > For reference: about how large are your insulators?
> > 73 Mac N8TT
> >
> > --
> > J. Mc Laughlin; Michigan U.S.A.
> > Home: JCM@Power-Net.Net
> > "Ken" <cprstn54zz@att.net> wrote in message
> > news:73fjj09bk8qu0ckiadsr3gfo9r0ejmdqct@4ax.com...
> >
> >>I just picked up some small egg insulators and have a question.
> >>
> >>I had assumed that the wire went through the hole, was routed back in
> >>the groove to the far end of the insulator, and was twisted back on
> >>the standing part. The two loops overlap, as it were. However, the
> >>groove for the wire continues all around the egg, including the near
> >>end of the insulator opposite the standing part. This suggests some
> >>kind of fancy wire routing is expected.
> >>
> >>How come they continue the groove all around? Do these sometimes get
> >>used with the insulator in tension and the loops not overlapping?
> >>
> >>Ken KC2JDY

> >>
> >>
> >>Ken
> >>(to reply via email
> >>remove "zz" from address)
> >
> >
> >
>

2821. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 01:29:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jkr0fhf97qq3e@corp.supernews.com>
Source record: 89942

Dave Shrader wrote:
> . . .
> A major point of caution is required. The NEC requires ONLY ONE ground
> connection. Multiple ground connections introduce VERY SERIOUS ground
> loops that may violate the NEC criteria. This opens a VERY LARGE loop
> hole in your home owner's insurance policy. If you are adding a second
> earth [ground] connection at your station use an isolation transformer
> to break up the ground loops in the basic 120 VAC connection. Consult
> with an electrician regarding your local and NEC codes.
> . . .

My NEC book is getting pretty old now, 1990, but at that time, multiple grounds were often not only permitted, but required. And a *minimum* spacing was sometimes specified.

For example, section 250-84, Resistance of Made Electrodes: "A single electrode consisting of a rod, pipe, or plate which does not have a resistance to ground of 25 ohms or less shall be augmented by one additional electrode of any of the types specified in Sections 250-81 or 250-83. Where multiple rod, pipe, or plate electrodes are installed to meet the requirements of this section, they shall be not less than 6 feet (1.83m) apart."

Or section 250-81(a), Metal Underground Water Pipe: ". . .A metal underground water pipe shall be supplemented by an additional electrode of a type specified in Section 250-81 or in Section 250-83. The supplemental electrode shall be permitted to be bonded to the grounding electrode conductor, the grounded service-entrance conductor, the grounded service raceway, any grounded sevice enclosure, or the interior metal water piping at any convenient point."

When I replaced the service (in 1979) in my 1952 house, the system ground was a water pipe connection and I was required to add a ground rod. Neither was considered adequate in itself; both were required by the code at that time.

I agree wholeheartedly about consulting an electrician. Non-electricians (including me) often have mistaken ideas about the content of the NEC. It doesn't hurt to have an up to date copy of the NEC for reference, either, if you anticipate doing any of the work yourself.

Roy Lewallen, W7EL

2822. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 02:17:59 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10jktqvt3cmch07@corp.supernews.com>
Source record: 89943

To Bill Turner,

my tests showed no difference between Horizontal and Vertical propagation. Vertical is quite busy here, lots of interference. Horizontal, on the other hand plays much better.

My question was antenna design, not the propagation issues. Thanks for trying though.

Andrey

"Dale Parfitt" <par@parelectronics.com> wrote in message news:mIs_c.2344$vI2.712@trnddc02...
>
> "Bill Turner" <noway@nohow.com> wrote in message
> news:rohkj0pgas2rhcqb7iu530g22ttfkv9mjv@4ax.com...
> > On Sat, 4 Sep 2004 14:57:09 -0700, "Andrey" <a8421@intergate.bc.ca>
> > wrote:
> >
> > >Greetings to all the antenna experts here!
> > >I want to create horizontally polarized antenna, low profile, located
> above
> > >large ground plane. And I need it to be omnidirectional (sort of) and
> have
> > >sufficient gain in horizontal plane.
> > >My frequency of interest is 900 MHz. The ground plane is a roof of a
car.
> > >I tried loops, from 50 to 300 mm diameter, radiation goes up if I mount
> it
> > >above the ground plane.
> > >Any ideas?
> > >Thank you,
> > >Andrey
> >
> > _____
> >
> > FWIW, horizontal polarization at 900 MHz won't get you far. Vertical is
> > preferred because horizontal is rapidly absorbed by ground loss. On the
> > other hand, if you don't *want* to get very far, use a vertical and just
> > reduce power.
> >This will be sad news to all the V/U weak signal ops who have
consistantly
> covered long distances using horizontal polarity.
>
> Dale W4OP

>
>

2823. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 03:04:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chdvnn$s9r$1@hercules.btinternet.com>
Source record: 89944

Maximum ground loss during wave reflection, between low resistance sea water and very high soil resistivities, could very well be when soil impedance is of the order of 377 ohms. Or is related to that number.

This is because, on the average of incidence angles, soil is more likely to absorb than reflect wave energy received from free-space. There's a better impedance match with free space at 377 ohms. The reflection coefficient is smaller.

Soil permittivity and frequency will also have an effect on the ballpark in which maximum absorption and hence maximum transmission loss lies.

Reg, G4FGQ

2824. Re: How to measure SWR

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 03:12:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <110lj0h0bs59rt6rvmt1evgh9s9ti0n2ka@4ax.com>
Source record: 89945

On Sat, 4 Sep 2004 14:08:53 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>NOTE: In the above description and calculation there is no mention of Zo,
>terminating impedance, source impedance, reflection coefficient, forward
>power, reflected power, reflected volts, reflected current, Smith charts, or
>conjugate matches. All these things are superflous to the determination. No
>information other than the two voltage measurements is needed.

Hi All,

No mention merely means there is no offer of accuracy (not very
important, eh what?). These two measurements (repeated at intervals)
can reveal a SWR that varies along the length of the line like a snake
- UNLESS of course, you DO observe unmentionables like Load reflection
co-efficients and Source reflection co-efficients. As such, a
description of how not to measure SWR, but rather how to exhibit error
if you perchance have the misfortune of having a transmitter that is
unmatched to a 50 Ohm transmission system whose load is in fact
mismatched also.

Need I point out that if both ends are matched - what's the point in
measuring SWR? ;-)

73's
Richard Clark, KB7QHC

2825. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 03:35:55 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <vQv_c.19713$Ka6.1064@okepread03>
Source record: 89946

"Roy Lewallen" <w7el@eznec.com> wrote

> Dave Shrader wrote:
> > . . .
> > A major point of caution is required. The NEC requires ONLY ONE ground
> > connection. Multiple ground connections introduce VERY SERIOUS ground
> > loops that may violate the NEC criteria. This opens a VERY LARGE loop
> > hole in your home owner's insurance policy. If you are adding a second
> > earth [ground] connection at your station use an isolation transformer
> > to break up the ground loops in the basic 120 VAC connection. Consult
> > with an electrician regarding your local and NEC codes.
> > . . .
>
> My NEC book is getting pretty old now, 1990, but at that time, multiple
> grounds were often not only permitted, but required. And a *minimum*
> spacing was sometimes specified.

Outdated only regarding water pipe Roy, but good advice. And Dave's above interpretation of NEC is a misunderstanding of the subject - easy to do so consult a professional if you have any douvbt whatsoever about what your are doing. Isolation transformers are not an option for isolating a station ground from AC service entrance. They are permitted only in lmited cases where independent grounding is required, and in other cases where HV isolating transformers or fiber optic isolate feedlines. No one in this group will likely have that requirement, so put that out of your mind Dave. You *MUST* bond your station ground to the AC service main ground. Ignore this at the peril of your entire system, which had better be 100% isolated from all power and external feedlines and grounds. That is an option for protection, isolating from *everything*. But it means unplugging and shorting to ground all feedlines, disconnecting and removing RF ground connections, disconnecting computer modems, telephone, and AC power to all of your connected equipment. A really poor option in my opinion, because if you forget something, or risk your life trying to disconnect during a surprise thunderstorm, what was it worth?

>
> For example, section 250-84, Resistance of Made Electrodes: "A single
> electrode consisting of a rod, pipe, or plate which does not have a
> resistance to ground of 25 ohms or less shall be augmented by one
> additional electrode of any of the types specified in Sections 250-81 or
> 250-83. Where multiple rod, pipe, or plate electrodes are installed to
> meet the requirements of this section, they shall be not less than 6
> feet (1.83m) apart."
>
> Or section 250-81(a), Metal Underground Water Pipe: ". . .A metal

> underground water pipe shall be supplemented by an additional electrode
> of a type specified in Section 250-81 or in Section 250-83. The
> supplemental electrode shall be permitted to be bonded to the grounding
> electrode conductor, the grounded service-entrance conductor, the
> grounded service raceway, any grounded sevice enclosure, or the interior
> metal water piping at any convenient point."
>
> When I replaced the service (in 1979) in my 1952 house, the system
> ground was a water pipe connection and I was required to add a ground
> rod. Neither was considered adequate in itself; both were required by
> the code at that time.
>
> I agree wholeheartedly about consulting an electrician. Non-electricians
> (including me) often have mistaken ideas about the content of the NEC.
> It doesn't hurt to have an up to date copy of the NEC for reference,
> either, if you anticipate doing any of the work yourself.
>
> Roy Lewallen, W7EL

Jack Painter
Virginia Beach VA

2826. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 04:05:55 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <6u3lj0lbk3g5g2pvd0r1be817lcecnkfuj@4ax.com>
Source record: 89947

On Sat, 4 Sep 2004 17:12:22 -0400, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

> For reference: about how large are your insulators?

These are for QRP: Around .75" X 1.25", ceramic, green, with 1/8"
holes. Item EGS1 at:
http://users.erols.com/rfc/anttacc.htm

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

2827. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 04:16:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <244lj0lqc5cs8vchfh9u6c497rno63v9t1@4ax.com>
Source record: 89948

On Sun, 5 Sep 2004 03:04:23 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>when soil impedance is
>of the order of 377 ohms.

Hi Reggie,

Is THIS the soil in your garden? Must be miserable for DX! That would be an exceedingly deep pile of very dry sand you are on. Quite remarkable stuff where ever you might find it. Like the green cheese the moon was supposedly made of, you have more lore from the aged domestic goddess file than one could have imagined.

What coefficients would that be for your program? What would the conductance be? How many radials would it resolve to? Can you even guess the Q? So many questions and easily suitable for the Magic 8-ball "Try again later."

73's
Richard Clark, KB7QHC

2828. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 07:14:41 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <VhaZFvChzrOBFAuz@ifwtech.co.uk>
Source record: 89949

Roy Lewallen wrote:
>Dave Shrader wrote:
>> . . .
>> A major point of caution is required. The NEC requires ONLY ONE
>>ground connection. Multiple ground connections introduce VERY SERIOUS
>>ground loops that may violate the NEC criteria. This opens a VERY
>>LARGE loop hole in your home owner's insurance policy. If you are
>>adding a second earth [ground] connection at your station use an
>>isolation transformer to break up the ground loops in the basic 120
>>VAC connection. Consult with an electrician regarding your local and NEC codes.
>> . . .
>
>My NEC book is getting pretty old now, 1990, but at that time, multiple
>grounds were often not only permitted, but required. And a *minimum*
>spacing was sometimes specified.
>
>For example, section 250-84, Resistance of Made Electrodes: "A single
>electrode consisting of a rod, pipe, or plate which does not have a
>resistance to ground of 25 ohms or less shall be augmented by one
>additional electrode of any of the types specified in Sections 250-81
>or 250-83. Where multiple rod, pipe, or plate electrodes are installed
>to meet the requirements of this section, they shall be not less than 6
>(1.83m) apart."

Is it something like this? Multiple ground rods are permitted
(encouraged, even) in order to establish one good ground connection; but
the wiring system can have only one ground connection.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2829. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 07:40:41 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <p5mOwBB5LsOBFwpQ@g3ohx.demon.co.uk>
Source record: 89950

In message <chdovnolc1@titan.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> writes
>
>"Roy Lewallen" wrote
>>
>> If we connect a transmitter to an SWR meter, and then to a long piece of
>> lossless cable with the same Z0 as the SWR meter, and finally to a load,
>> the SWR meter reading will be the same as the VSWR on the cable, i.e.,
>> the ratio of maximum to minimum voltages on the line.
>
>=======================================
>
>It is at this point where impressionable novices are led astray by old
>wives, never again to return to logical thought on the subject.
>
>They imagine that because the meter happens to indicate the swr on the line,
>the meter is actually responding to the swr on it. Whereas the meter is
>actually responding to the modulus of the reflection coefficient caused by
>the line's input impedance regardless of what its Zo may be. The act of
>making the line's Zo and the meter's resistance both equal to the
>transmitter's designed-for load resistance, has put additional infomation
>into the system. Cooking the books!
>
>If there's an SWR to be indicated it is on a long line between meter and the
>transmitter. In the absence of such a line the meter wastefully discards
>half of the information it is presented with and indicates the modulus of
>the reflection cofficient. A more appropriate name is TLI.
>----
>Reg, G4FGQ
>
>

Would this help?

On the subject of whether the TX impedance affected the SWR reading, I
propose the following practical test:
Using standard CATV bits and pieces, connect up the following-
Signal source > directional coupler #1 > directional coupler #2 > load.
DC#1 picks off the forward signal, DC#2 picks off the reverse.
Use a spectrum analyser to measure signal levels.
Beforehand check the DCs for go directivity, and chose a frequency where
it is best (at least 25dB). This will probably be around 20MHz.
With good load, measure forward and reverse signals.
Repeat with known load mismatch.
Screw up source impedance (eg add T-piece at source o/p, and

double-terminate).
Repeat the above.
Think about what the results mean.

Ian.

--

2830. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 08:12:06 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <7X3yY8FWpsOBFAZy@ifwtech.co.uk>
Source record: 89951

Jack Painter wrote:
>Right Ian, having equipment spread out over a wide area is an
>undesireable condition, but a reality for many operators. Running 3"
>wide or greater copper strapping in individual paths to one single bus
>"collector" is a challenge, but one worth trying. Equipment stacked or
>racked together could certainly be "grouped" and a common bonding
>strap run for each group to the SPG. But 20 linear feet of bus bar
>could have huge transient voltages developed across it from a nearby
>strike. As in a few hundred thousand volts between supposedly
>"grounded' equipment. Hence the importance of all equipment connecting
>to the same ground point, not via a long run of common bus bar to that
>ground point. Make your compromises according to your individual
>requirements and station layout.

Thanks very much for those thoughts, Jack.

As I'd guessed, you had some good suggestions, but you can see their practical problems too. The same applies to an alternative method, which is to group related items of equipment as closely as possible, and connect them by the shortest possible straps to a large sheet of metal.

The key feature is that this sheet should be *very wide*, to create a very low inductance and help minimize any voltage drops along its length. Conductor thickness doesn't matter in this location, so a sheet of copper-clad PC board is fine. It's also very easy to solder short grounding straps onto the PC board, and move them around without having to disconnect the whole sheet to drill it.

Some people put the sheet on the table, and the gear on top of the sheet. If there is a shelf carrying another level of equipment above, another practical way is to fasten the sheet to the underside of the shelf.

The reason why conductor thickness doesn't matter in this location is that we don't expect full-bore lightning surges through the station itself. The ground bonding at the common service entrance should have diverted the main surge safely to ground, so the equipment bonding inside the station should only need to deal with very much smaller currents - smaller, but still large enough to damage sensitive electronics. Also, the higher-frequency components of the surge will only run along the surface anyway, so what matters most is width and surface area rather than thickness of copper.

As Jack says, busbars are a particular invitation to develop voltage drops along their length. This "ground-sheet" system accepts there will be some voltage drop along its length, but does everything practicable

to minimize it. A wide sheet is vastly better than busbars, and solid copper busbars are a particular waste of money - a large sheet of scrap PC board will do it far better, for almost nothing.

If I had the luxury of a large station, I'd use these sheets as part of a wider-scale "grouping" system, as Jack suggests.

>Just realize that in a nearby-by strike, lightning will find the weak
>points in any system and exploit that weakness to the fullest
>possibility.

In this climate, lightning is actually quite a minor hazard. What has driven me to organize and bond equipment together is the need to control RFI due to ground currents (of which I generate rather a lot). What's good for the one is generally good for the other... and often good for received noise reduction too.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2831. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 09:46:23 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <WOGdnX-rCdrsfafcRVn-pQ@gwi.net>
Source record: 89952

Andrey wrote:
> Greetings to all the antenna experts here!
>
> I want to create horizontally polarized antenna, low profile, located above
> large ground plane. And I need it to be omnidirectional (sort of) and have
> sufficient gain in horizontal plane.
>
> My frequency of interest is 900 MHz. The ground plane is a roof of a car.
>
> I tried loops, from 50 to 300 mm diameter, radiation goes up if I mount it
> above the ground plane.
>
> Any ideas?
>
> Thank you,
>
> Andrey
>
>
Good Morning Andrey,

What you are proposing is not an easy task any horizontal antenna placed close to a good ground plain is going to have most of it's signal at 90 degrees. (Straight up) Until the antenna is at least 1/2 wave above the ground plan. at that point it will start to show radiation to the horizon. EZNEC shows max gain at 30 degrees to the horizon for a 1/2 wave horizontal dipole mounted 1/2 wave above perfect ground and the pattern looks somewhat like a peanut shape. if you move the antenna up to 1 fullwave length above the ground plain then the patern does not change much but the elevation angle dose you then get a good lobe at 15 degrees and another at 45 degrees. hope this is of some help.
Dave kc1di

2832. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 09:59:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jlosal8dh6mf8@corp.supernews.com>
Source record: 89953

Ian White, G3SEK wrote:
> Roy Lewallen wrote:
>>
>> My NEC book is getting pretty old now, 1990, but at that time,
>> multiple grounds were often not only permitted, but required. And a
>> *minimum* spacing was sometimes specified.
>>
>> For example, section 250-84, Resistance of Made Electrodes: "A single
>> electrode consisting of a rod, pipe, or plate which does not have a
>> resistance to ground of 25 ohms or less shall be augmented by one
>> additional electrode of any of the types specified in Sections 250-81
>> or 250-83. Where multiple rod, pipe, or plate electrodes are installed
>> to meet the requirements of this section, they shall be not less than
>> 6 (1.83m) apart."
>
>
> Is it something like this? Multiple ground rods are permitted
> (encouraged, even) in order to establish one good ground connection; but
> the wiring system can have only one ground connection.

Well, yes and no. As I read it, all the ground electrodes have to be connected to the service box, as they are at my house. I have a water-pipe ground and a ground rod; they're physically widely separated, and each has its own conductor going back to the service box. So I guess you could call the service box a single "ground connection". The neutral and safety ground conductors of each circuit are individually grounded at the service box also, giving further support to interpreting its function as a single ground connection. A number of ground methods and devices are approved, such as buried rods or plates, concrete grounds, or (in my old code book anyway), water pipe ground. Some can be used alone and others need a second ground device as a supplement. When multiple ground rods are used, the code has requirements for bonding them to each other.

Roy Lewallen, W7EL

2833. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 10:14:46 UTC
From: richardharrison@webtv.net
Message-ID: <926-413AE716-16@storefull-3258.bay.webtv.net>
Source record: 89955

Richard Fry quoted Geoffrey Mendenhall who is responsible for the entire Harris broadcast transmitter line design as saying:
"If the source impedance were equal to the 50 ohm line impedance, half the transmitter`s output would be dissipated in its internal output source impedance."

Mendenhall is wrong.

A Class C amplifier`s "internal output source impedance" is largely "dissipationless resistance" produced by the non-conduction time during its RF cycle. A matched Class C amplifier typically produces efficiencies exceeding 50% by a comfortable margin. That`s why they are used despite their harmonic generating nonlinearity.

Best regards, Richard Harrison, KB5WZI

2834. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 10:17:17 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q07d9Fp0gp4U1@uni-berlin.de>
Source record: 89954

"Wes Stewart" wrote:
> Oh please. If an SWR meter, direction bridge, TLI or whatever you
> want to call it has decent directivity, i.e. the ability to discern
> forward and reflected power, forward and reflected waves, reflection
> coefficient, scattering parameters, or whatever you want to call them,
> then the applied power is immaterial.
>
> We are trying to measure a RATIO, not some absolute value of power.

However an SWR meter, direction(al) bridge, TLI or whatever you want to call it has NO ability to discern between two waves traveling in the same direction, unless their detectors are operating in the time domain -- which normally they do not. That is the "feature" causing the anomalies I have been writing about.

RF

2835. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 10:58:09 UTC
From: richardharrison@webtv.net
Message-ID: <10407-413AF141-13@storefull-3251.bay.webtv.net>
Source record: 89956

Richard Fry wrote:
"It doesn`t matter whether we state the result of measurement in units of SWR, return loss, or as a reflection coefficient -- they all give the same information -- ."

Correct. The units above are fungible. All are an expression of the mismatch of a load to the Zo of the transmission line.

With a Bird wattmeter, the reflection coefficient (rho) is the sq. rt. of the reflected power divided by the forward power.

SWR = 1+rho / 1-rho

Return loss in dB = 20 log (rho)

Return loss in dB = 10 log (Ref.Pwr./Fwd.Pwr.)

Rho = (ZL/Zo)-1 / (ZL/Zo)+1

None of the expressions above include the source Z, therefore it does not apply.

Best regards, Richard Harrison, KB5WZI

2836. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 11:37:14 UTC
From: garigue <garigue@comcast.net>
Message-ID: <KTC_c.376136$%_6.320311@attbi_s01>
Source record: 89957

Funny that you should mention this as I bought some at a hamfest yesterday.
This was the first time I have ever seen eggs this small. They should go
well with the K2 in the field.

73 God Bless ... Tom KI3R Belle Vernon Pa.

> > For reference: about how large are your insulators?
>
> These are for QRP: Around .75" X 1.25", ceramic, green, with 1/8"
> holes. Item EGS1 at:
> http://users.erols.com/rfc/anttacc.htm

2837. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 11:39:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0c6pFpm1abU1@uni-berlin.de>
Source record: 89958

"Roy Lewallen" wrote:
> Sorry, it still isn't clear.
>
> What, then, is "system SWR"? How do you define it?

System SWR is the net SWR of a component assembly present at its input terminals. "Antenna system SWR" then is comprised of the net SWR of everything in the RF path from the output of the SWR meter to and including the antenna. In a transmitter, the antenna system begins electrically at the output of the SWR meter -- physically close to the output connector of the tx.

> Obviously, if we have a voltage or current source of fixed value
> and change the source impedance, the power delivered by the
> source changes,

But the mechanism I've described considers the re-reflection by a mismatched source of power not initially absorbed by a mismatched load -- not that a change of source impedance changed the total power flowing out of the source.

> ...both the "forward" and "reverse" powers
> will change, but by the same fraction...

Agree. I'm not so sure that the Model 43 or equivalent methods used in/with transmitters accurately preserves the power ratios under these conditions, though.

RF

2838. Re: Antenna Ground

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:06:14 UTC
From: "Me again..." <3No14Spam15@Hotmail.com>
Message-ID: <413b0138@post.usenet.com>
Source record: 89959

**** Post for FREE via your newsreader at post.usenet.com ****

"Reg Edwards"
> Maximum ground loss during wave reflection, ...
> ... could very well be when soil impedance is
> of the order of 377 ohms. ...
> ...impedance match with free space at 377 ohms....

He he he.

What if your garden is in the 'near field' ? (Obviously no "what if" at all - it almost certainly is.) Then the garden should be some other value, NOT 377 ohms, to match your locally generated EM wave.

Also, the ground properties would obviously be NON RECIPROCAL (!!!) since the other guy's signal would presumably be in the far field and would arrive in the V/I ratio of 377 ohms.

-=-=-=

2839. Re: Real antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:11:07 UTC
From: Mike Luther <mike.luther@ziplog.com>
Message-ID: <10jm0irbo9fvha8@corp.supernews.com>
Source record: 89960

Jim, are there any beverage style antennas at the site there which would
be used for reception of the reflected return signals?

Thanks!

Mike - W5WQN

NN7Kex(NOSPAM)k7zfg wrote:

> Richard wrote:
>
>> The sort that even the "big guns" dream about
>>
>> http://www.antenna.be/
>>
>> Rgds
>> Richard SO5GB
>>
>>
> One DONT see listed is the (actually there are 2 of em!) Over-the
> Horizion radar antennas constructed about 30 miles south of Tule Lake
> , Ca, and looks to be about 20 MHz freq wise! Tho shut down, these
> are still mothballed, and are about 3/4 MILE LONG array of Rohn tower
> sections, every (again, as observed, not measured-- Wackenhut the
> security outfit, would NOT be amused if CLOSELY inspected!) , spaced
> about every 15-20 feet, this on a surface of chicken wire/ fenceing
> material , on the ground surface, about 800 - 1000 foot deep, and, a
> backstop, again guetimate, , about 10-15 foot high! aimed at Russia!
> Would be interesting to try one of these out, sometime (Work all
> Oblisks, QRP??) sometime, but, might not have the military very happy
> with you !! Jim NN7K

--

--> Sleep well; OS2's still awake! ;)

Mike Luther

2840. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:18:09 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chf061dhd1@hercules.btinternet.com>
Source record: 89961

What's a directional coupler?
What do they look like?
Don't bother answering those questions.

Why do the arguers, when caught in a tight corner, always escape to UHF for help from directional couplers?

There are NO directional couplers at HF. They are as scarce as real swr meters. So they cannot be used in futile attempts to explain what really happens at HF.

You're next move will be to drag in scattering-matrices.

Reg ;o)

2841. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:25:09 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <1b1mj0ltm4saa433bq1fke90d5dj5i9q3r@4ax.com>
Source record: 89962

On Sun, 05 Sep 2004 11:37:14 GMT, "garigue" <garigue@comcast.net>
wrote:
>Funny that you should mention this as I bought some at a hamfest yesterday.
>This was the first time I have ever seen eggs this small. They should go
>well with the K2 in the field.

After buying them, I am thinking I would just be better off with a
knot. See:
http://www.bunganutlake.org/windonwire-knot.htm

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

2842. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:41:54 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <2q0fs6Fq4l5jU1@uni-berlin.de>
Source record: 89963

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:chf061dhd1@hercules.btinternet.com...
> What's a directional coupler?
> What do they look like?
> Don't bother answering those questions.
>
> Why do the arguers, when caught in a tight corner, always escape to UHF
for
> help from directional couplers?
>
> There are NO directional couplers at HF.

So what is the element in my Bird Thruline then, and how does it work?

I'd dying to hear at what frequencies directional couplers suddenly begin to
"exist". A sudden change in the laws of Physics at some arbitary frequency
named by man.

(Most SWR meters I've seen use a directional coupler, by the way. Even the
cheap ones.)

I think we've got to the root of Reg's problem. Just like the last time he
raised this nonsense.

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

2843. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:49:06 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0g9uFpfmr2U1@uni-berlin.de>
Source record: 89964

"Richard Clark" wrote
> >> To date in this matter, I have yet to see any concrete value of source
> >> Z offered from those of the NOT 50 Ohms camp. Further, I have yet to
> >> see any of them offer any experimental confirmation of their assertion
Richard Fry wrote:
> >Below is a quote from a paper titled "A Study of RF Intermodulation
Between
> >FM Broadcast Transmitters Sharing Filterplexed or Co-located Antenna
> >Systems," by Geoffrey Mendenhall. (clip). Quoting Mendenhall, "...If the
> >source impedance were equal to the fifty ohm line impedance, half of the
> >transmitter's output power would be dissipated in its internal output
source
>> impedance..."
Walter Maxwell wrote
> The last sentence in the paragraph above is incorrect. This shows that
> the writer of the quote is in the unbelievably large group that still
believes
> incorrectly that half of the tx power would be lost if if it were
conjugately
> matched. But we all know that efficiencies greater than 80% is achieved
> by Class C amps, and greater than 60% is achieved by Class B amps
> when the source impedance of the tx is 50 ohms resistive and the load
> impedance is also 50 ohms resistive.

To Walter Maxwell:

1. You may be interested in reading Mendenhall's complete paper, which I will email to you. The lab measurements reported in it used two, operating, high-power FM broadcast transmitters -- and support his statements about amplifier source impedance and its consequences.

2. I will ask again, if transmitters have a 50 ohm source impedance, what accounts for the fact that TV ghosts are produced by an antenna system reflection having a sufficient delay time? Calculations and measured data show that the energy that produced the ghost originated by re-reflection off the TV transmitter output stage of far-end reflections in the antenna system. If the tx source impedance was 50 ohms, it would absorb the far-end reflection, which would be incapable of producing a ghost image.

Further, if the tx source impedance was 50 ohms, then the RF intermodulation measured and reported in Mendenhall's paper -- and verified in real-world installations by the radiated interference those IM products produced -- would not occur.

RF

2844. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 12:58:45 UTC
From: richardharrison@webtv.net
Message-ID: <162-413B0D85-1@storefull-3254.bay.webtv.net>
Source record: 89966

Reg, G4FGQ wrote:
"There are NO directional couplers at HF."

Behold the Bird wattmeter!

Why not call the SWR indicator a "mismatch meter"?

Best regards, Richard Harrison, KB5WZI

2845. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 13:05:03 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0h7rFpi7v3U1@uni-berlin.de>
Source record: 89965

The meaning of this paragraph in my last post in this thread is more clearly understood when two commas are added...

>But the mechanism I've described considers the re-reflection,
>by a mismatched source, of power not initially absorbed by a
>mismatched load -- not that a change of source impedance
>changed the total power flowing out of the source.

2846. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 13:15:09 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <Ek$VnPDdFxOBFw9g@g3ohx.demon.co.uk>
Source record: 89967

In message <chf061dhd1@hercules.btinternet.com>, Reg Edwards
<g4fgq.regp@ZZZbtinternet.com> writes
>What's a directional coupler?
>What do they look like?
>Don't bother answering those questions.
>
>Why do the arguers, when caught in a tight corner, always escape to UHF for
>help from directional couplers?
>
>There are NO directional couplers at HF. They are as scarce as real swr
>meters. So they cannot be used in futile attempts to explain what really
>happens at HF.
>
>You're next move will be to drag in scattering-matrices.
>---
>Reg ;o)
>
>

Reg, I thought that a DC was essentially any device which sampled some
of the RF signal travelling in one direction, and (if perfect) none of
the signal travelling in the other. Over the past 40 years, I have had
lots of dealings with them. I've even designed some which were bought in
their thousands (if not millions). Some of them seemed to work from
below 5MHz to over 870MHz (well, I THOUGHT they did, and so did the
people who bought them).

Where did I go wrong?

On the positive side, I never went as far as to claim that they would
measure SWR.

Ian.
--

2847. Re: Coax and Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 14:14:09 UTC
From: wildlife_video@breathe.com
Message-ID: <413b1f30$1_1@mk-nntp-1.news.uk.worldonline.com>
Source record: 89968
Cross-posted to: rec.radio.amateur.antenna,alt.ham-radio.hf

By strapping the coax to the earth,ground or negative (or whatever) part of the aerial,you will effectively
cancel out any gain or effect the 20' part had.
Obviously you dont have the space for a 'T' where the coax is the bottom bit of the 'T' and the top
Parts are say 20' each way give ot take?
If thats no good,then how about feeding the coax to a longer wire closer to the house and having
the ground wire going down to earth,vertically? If you could have the long wire inclining up the
garden somewhat,it would be effectively an inverted-v antenna.Keeping it horozontal would
leseen the tendancy to throw signals back over your house however.
Does this help?
G7EBY

"Doug Birky" <dgbirky@voyager.net> wrote in message
news:10hup23fk7gtt76@corp.supernews.com...
> I'm putting up an offset dipole. I'm attaching a 4:1 balun. I'm running
> RG-8 to the balun. The dipole will be attached at 20' and the other end
> will
> be about 40'. My question is can the coax be tie-straped to the short end
> of the dipole antenna wire and run back with it toward the houes? This is
> basically to keep a big loop from hanging down and also keeping the wife
> happy since it would look much cleaner. I didn't know if this would have a
> large impact on operation or not.
>
> 73
> Doug / KC8YEC
>
>

2848. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 14:35:33 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <246mj0d84t4t8cp2usfi62vessva3ulm9o@4ax.com>
Source record: 89969

On Sun, 5 Sep 2004 12:18:09 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|What's a directional coupler?
|What do they look like?
|Don't bother answering those questions.
|
|Why do the arguers, when caught in a tight corner, always escape to UHF for
|help from directional couplers?
|
|There are NO directional couplers at HF. They are as scarce as real swr
|meters. So they cannot be used in futile attempts to explain what really
|happens at HF.
|
|You're next move will be to drag in scattering-matrices.

Why not. I have used an HP3577 network analyzer with an S-parameter
test set that was specified to work over the frequency range of 100 Hz
to 200 Mhz.

I guess the guys at HP didn't realize that you can't do this.

2849. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 15:37:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0acmj0dg53u56la2o3pndc7nnsml7m35ok@4ax.com>
Source record: 89970

On Sun, 5 Sep 2004 07:49:06 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>if transmitters have a 50 ohm source impedance,

Hi OM,

There you go again "IF." IF indeed!

It seems you find controversy where there is none. :-)

I would again suggest you read what I wrote, and point out what
exactly your contention is with IT.

73's
Richard Clark, KB7QHC

2850. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 15:44:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0qi0Fq2p4tU1@uni-berlin.de>
Source record: 89871

And another example in point:

From the input to a TV transmit antenna system, tx disconnected, I have personally measured the far-end antenna system reflections of a 2T sin² video pulse (0.25 µs H.A.D.) modulated onto a TV channel carrier, and detected by a vestigial sideband demodulator tuned to that TV channel. A high-directivity directional coupler at the input to the main line, a display device, calibrated attenuators, and the time difference between the incident and reflected pulse enable accurate measurement of the reflection coefficient of the antenna system.

This was a common practice after a new antenna system installation to measure and optimize the far-end match for the best quality radiated signal, and was pioneered by RCA Broadcast Eqpt Div, my employer at the time. More elegant means are used these days.

When this test shows a 5% pulse return 2 µs after the incident pulse time (for example), then the same pulse passed through the tx also shows nearly exactly the same reflection % and time separation -- assuming there is enough RF delay in the system for the reflection to be resolved in the demodulated waveform.

As the directional coupler driving the normal demodulator at the TV station is looking at forward power only, it is clear that the reflection from the far end of the antenna system has been re-reflected from the TV tx output stage, and NOT absorbed by it in its "conjugate impedance."

RF

2851. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 15:57:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ukcmj01g2bpig3phlefgvv3i86rvg9d93v@4ax.com>
Source record: 89872

On Sun, 5 Sep 2004 05:14:46 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Mendenhall is wrong.

Hi Richard,

But this gets curiouser and curiouser (as Alice through the Looking Glass would offer).

Cited as an example of the "NOT 50 Ohm" society (and one of its leading proponents) we find that Geoff Mendenhall's notable achievement in 1968 was building a 400W FM amplifier. Truly a hands-on achievement. Now if we simply review the historical archive and ask Geoff himself what the Z of his design was, we find by his own hand:
RF Output Impedance: 50 Ohms

Let's see, no technical argument, and sources that are self-contradicting. Whatchagonnado? Punt? :-)

73's
Richard Clark, KB7QHC

2852. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 16:05:24 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0rq1Fqgdqv U1@uni-berlin.de>
Source record: 89873

Richard Clark wrote
>"Richard Fry" wrote:
> >if transmitters have a 50 ohm source impedance,
>
> It seems you find controversy where there is none. :-)
> I would again suggest you read what I wrote, and
> point out what exactly your contention is with IT.

OK. Earlier you wrote, "To date in this matter, I have yet to see any concrete value of source Z offered from those of the NOT 50 Ohms camp. Further, I have yet to see any of them offer any experimental confirmation of their assertion (made rather simple by the exhibition of uncertainty)."

Our controversy is illustrated by my posts with an opposite conclusion, beginning last night and continuing this morning.

As for experimental evidence, I report some in my post here of a few minutes ago about making refl coeff measurements of TV transmit antenna systems.

Mendenhall's paper also has experimental evidence of this. I will email it to you.

I trust my contention is now clear to you.

RF

2853. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 16:14:56 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0sbsFps01nU1@uni-berlin.de>
Source record: 89874

"Richard Clark" wrote
> But this gets curiouser and curiouser (as Alice through the Looking
> Glass would offer).
>
> Cited as an example of the "NOT 50 Ohm" society (and one of its
> leading proponents) we find that Geoff Mendenhall's notable
> achievement in 1968 was building a 400W FM amplifier. Truly a
> hands-on achievement. Now if we simply review the historical archive
> and ask Geoff himself what the Z of his design was, we find by his own
> hand:
> RF Output Impedance: 50 Ohms
>
> Let's see, no technical argument, and sources that are
> self-contradicting. Whatchagonnado? Punt? :-)
>
> 73's
> Richard Clark, KB7QHC

2854. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 16:21:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5cemj0la8kcn9s32i9hc1culai7710fa3f@4ax.com>
Source record: 89875

On Sun, 5 Sep 2004 11:05:24 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>I trust my contention is now clear to you.

Hi OM,

Actually no. Your reference, Mendenhall, specifically writes about
his design:
"It was necessary to determine the plate
load impedance (formula) = 1000 Ohms
where Emin min drop across the tube in saturation
I1 ac plate current.

"Since this Zp was to be coupled into a
Z output of 50 Ohm, a impedance transformation
of 20:1 was needed."

Fairly straightforward stuff there. Geoff's own notes are the model
of economy and directly to the nut of the issue. His notes are also
straight from old school first principles. As often happens, the more
elaborate the discussion of rather simple matters belies the inference
of hucksterism.

Seems like ALL my arguments, references, citations, data offered and
so on are congruent with Geoff's own description of amplifiers. I
certainly need no further testimony from him as I am perfectly capable
of finding his own work and offering it here. Thanx anyway, but no
thanx.

It would also serve you better to read more and write less, after all
I SPECIFICALLY mandated a discussion of transistor amateur amplifiers.
When I allowed this divergence to tubes, Mendenhall himself proved
that NOTHING changes in the physics of sources.

73's
Richard Clark, KB7QHC

2855. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 16:25:02 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0suqFq95ruU1@uni-berlin.de>
Source record: 89876

"Richard Clark" wrote
> Now if we simply review the historical archive
> and ask Geoff himself what the Z of his design was,
> we find by his own hand:
> RF Output Impedance: 50 Ohms
>
> Let's see, no technical argument, and sources that are
> self-contradicting. Whatchagonnado? Punt? :-)

You assume he refers to the source impedance of/at output of the amplifier. More likely he is following convention and stating the load impedance that the amplifier was designed to work into.

The source impedance of most transmitters is not published even today. If it was, probably we wouldn't be having all of this confusion about it, and its effects.

RF

2856. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 16:49:07 UTC
From: richardharrison@webtv.net
Message-ID: <26626-413B4383-73@storefull-3253.bay.webtv.net>
Source record: 89878

Brian Reay wrote:
"---dying to hear at what frequencies directional couplers suddenly
begin to exist."

It isn`t sudden.

They sure work at audio frequencies. In telephones, they are used to
prevent the user`s voice from overpowering the distant party`s voice in
the user`s ear. They are called hybrids.

Hybrids are also used to couple a 2-wire circuit which simultaneously
carries both directions of transmission with a 4-wire circuit consisting
of a transmit pair and a receive pair.

Best regards, Richard Harrison, KB5WZI

2857. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 16:51:57 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q0uh9FqdjakU1@uni-berlin.de>
Source record: 89877

"Richard Clark" wrote
> I SPECIFICALLY mandated a discussion of transistor
> amateur amplifiers.

At least there appears to be an acknowledgement that some RF amplifiers do not have a source impedance that is the conjugate of their load impedance. So progress has been made.

RF

2858. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:05:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1jgmj097jdkj5s0o9klbqcn6gb7anijjs9@4ax.com>
Source record: 89879

On Sun, 05 Sep 2004 16:21:27 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Sun, 5 Sep 2004 11:05:24 -0500, "Richard Fry" <rfry@adams.net>
>wrote:
>
>>I trust my contention is now clear to you.
>
>Hi OM,
>
>Actually no. Your reference, Mendenhall, specifically writes about
>his design:

Hi All,

I would add further, Mendenhall's notes of his design, as the model of clarity, include references, one of which is particularly notable and estimable within this group:
"Treman [sic], F.E.; "Electronic and Radio Engineering";
Mc Graw - Hill Book Co.; 1955"
the same publication I've had since the same date that Geoff built his transmitter. Geoff's attachments also include the data sheets from Eimac which show quite plainly that ALL of his formulas and computations are congruent with ALL sources of information in his references.

Another reference:
"Goodman, Byron (Ed.); 'The Radio Amateur's Handbook';
American Radio Relay League; Newton, Conn.;
1966"
(I used to have that publication, back then, too)

I also vaguely note some inference of peculiar intermodulation products that would be produced by a transmitter with 50 Ohm output characteristic - in that I may be mistaken because when the verbiage gets particularly dense to explain simple matters, I must admit my own filters kick in. However, Mendenhall's work was not simply that of an amateur's project, nor was it a school term paper, nor was it the speculation of an engineering sales pitch.

The report I am drawing upon was Geoff's own Type Acceptance application to the FCC which included all the technical specifications of spurs, intermodulation products, stability, efficiency (80%), class of operation, modulation, out-of-band responses.... I don't think I need go much further. :-)

For those who wish to read the COMPLETE story of how to build a rig,
how to specify it, how to measure it, and to note how it exactly
conforms to conventional wisdom; then visit:
http://www.techatl.com/wrek/docs/gnm_0011.htm
where you will find all of one page of theory, and 40 odd pages of
reality:
The WREK 425 Watt RF power amplifier, also known as the
"Goat-Mitter" was designed by Geoffrey N. Mendenhall (dubbed the
Goatman by WREK announcer, Ed Esserman) and constructed entirely
with hand tools by Geoff and the WREK staff in August of 1968.

73's
Richard Clark, KB7QHC

2859. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:06:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mphmj0luhclvfqtg6737hrc1l6812l94v2@4ax.com>
Source record: 89880

On Sun, 5 Sep 2004 11:25:02 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>You assume

Hi OM,

That is called a punt.

73's
Richard Clark, KB7QHC

2860. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:09:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nuhmj0pv9r3dlp22t4gq2sr6443urfgn9d@4ax.com>
Source record: 89881

On Sun, 5 Sep 2004 11:51:57 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>appears to be

Hi OM,

Another punt.

73's
Richard Clark, KB7QHC

2861. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:21:21 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q108dFq2qghU1@uni-berlin.de>
Source record: 89882

"Richard Clark" wrote
"Richard Fry" <rfry@adams.net> wrote:
>
> >You assume
>
> That is called a punt.

Neither of us can write that our conclusion about that spec was based on fact. Neither of us knows.

RF

2862. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:36:04 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <2q113oFq3o1pU1@uni-berlin.de>
Source record: 89883

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:26626-413B4383-73@storefull-3253.bay.webtv.net...
> Brian Reay wrote:
> "---dying to hear at what frequencies directional couplers suddenly
> begin to exist."
>
> It isn`t sudden.
>
> They sure work at audio frequencies. In telephones, they are used to
> prevent the user`s voice from overpowering the distant party`s voice in
> the user`s ear. They are called hybrids.
>
> Hybrids are also used to couple a 2-wire circuit which simultaneously
> carries both directions of transmission with a 4-wire circuit consisting
> of a transmit pair and a receive pair.
>
> Best regards, Richard Harrison, KB5WZI

Thank you for that Richard but I think you missed the British sense of
humour (or humor) ;-)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

2863. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:42:22 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10jmk07din2gn18@corp.supernews.com>
Source record: 89884

Thank you Dave,

for sharing with me results of your simulation. I got similar results. The thing that works is slit pipe (Alford's slot, see http://www.eta.chalmers.se/~pgp/alford_slot/alford_eng.html for example)

Pipe works over ground plane as well (not as well, beam gets lifted, stll there is enough energy looking on the horizon). It is such a cumbersome thing though - looks funny on car's roof. Not of ractical use.

And I still can not find anything else that does it.

Regards,

Andrey Gleener

"KC1DI" <elbc2@gwi.net> wrote in message news:WOGdnX-rCdrsfafcRVn-pQ@gwi.net...
> Andrey wrote:
> > Greetings to all the antenna experts here!
> >
> > I want to create horizontally polarized antenna, low profile, located above
> > large ground plane. And I need it to be omnidirectional (sort of) and have
> > sufficient gain in horizontal plane.
> >
> > My frequency of interest is 900 MHz. The ground plane is a roof of a car.
> >
> > I tried loops, from 50 to 300 mm diameter, radiation goes up if I mount it
> > above the ground plane.
> >
> > Any ideas?
> >
> > Thank you,
> >
> > Andrey
> >
> >
> Good Morning Andrey,
>
> What you are proposing is not an easy task any horizontal antenna placed
> close to a good ground plain is going to have most of it's signal at
> 90 degrees. (Straight up) Until the antenna is at least 1/2 wave above

> the ground plan. at that point it will start to show radiation to the
> horizon. EZNEC shows max gain at 30 degrees to the horizon for a 1/2
> wave horizontal dipole mounted 1/2 wave above perfect ground and the
> pattern looks somewhat like a peanut shape. if you move the antenna up
> to 1 fullwave length above the ground plain then the patern does not
> change much but the elevation angle dose you then get a good lobe at 15
> degrees and another at 45 degrees. hope this is of some help.
> Dave kc1di

2864. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 17:47:45 UTC
From: richardharrison@webtv.net
Message-ID: <6571-413B5141-70@storefull-3256.bay.webtv.net>
Source record: 89885

Richard Fry wrote:
"At least there appears to be an acknowledgement that some RF amplifiers do not have a source impedance that is the conjugate of their load impedance."

Those may be anomalous. I recommend King, Mimno, and Wing to anyone desiring the complete story on the conjugate matches.

To the extent that the amplifier is designed for a performance on demand that stresses it to its maximum safe dissipation, an amplifier of the Class C variety is designed for a perfectly matched load. It`s the economical thing to do.

You supply the tube with about all the volts it can safely take. Then you supply it with just enough load impedance to limit its current to all it can take under the heaviest loading it well encounter. That would be when it is conjugately matched to a 50-ohm load, the usual cable impedance specification.

The tank circuit is mostly a harmonic filter providing a very high impedance to the fundamental frequency and shorting out the harmonics.

Best regards, Richard Harrison, KB5WZI

2865. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:05:38 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <chfkhi$4rf$0$216.39.144.81@theriver.com>
Source record: 89886

(Jumping in after this argument has gone on for a long time)

This has evolved somewhat into an "apples and oranges" discussion. What Richard Fry appears to be concerned with is the reflection of a video pulse by the load (antenna) and its re-reflection (at a later time, dependent on the length and Vp of the transmission line) by the source (transmitter) and subsequent radiation (as a ghost image--the effect repeats, ad infinitum).

While this is certainly a real phenomenon, its effect is a function of both the mismatch at the load (S11) and the mismatch looking from the transmission line back toward the source (S22). It does NOT influence the VSWR and could, obviously, be significantly reduced by the use of a circulator at either end of the transmission line (which may not be practical at the power levels of televison transmitters, to use his example.)

73,
Bob Nielsen, N7XY

2866. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:06:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <55lmj09leue653ihhgqh48jpoel3ou6j5m@4ax.com>
Source record: 89887

On Sun, 5 Sep 2004 12:47:45 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>The tank circuit is mostly a harmonic filter providing a very high
>impedance to the fundamental frequency and shorting out the harmonics.

Hi Richard,

Even here, the Goatman offered in his notes that his finals tank (actually a series resonant Z match) offered a loaded Q of 2! (If I read his scribblings correctly.)

73's
Richard Clark, KB7QHC

2867. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:19:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3almj0lb00498vhr3qm7lmor85a5g16ktd@4ax.com>
Source record: 89888

On Sun, 5 Sep 2004 12:21:21 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>"Richard Clark" wrote
>"Richard Fry" <rfry@adams.net> wrote:
>>
>> >You assume
>>
>> That is called a punt.
>----------
>
>Neither of us can write that our conclusion about that spec was based on
>fact. Neither of us knows.

Hi OM,

This is called indicting your own authority - far more desperate than
a punt.

So,to this point you have failed to offer a technical discussion
(Xeroxed work of others accomplishments offered in its place is rather
banal), no personal experience at the bench to support your thesis,
you condemn your own authority, and you complain of my attitude. Of
those, perhaps the last is accurate as I find your responses to my
technical comments (supported by others you claimed would not rise to
a common camp) are met with risible content.

Even in the comedic foray you are seriously mismatched.

73's
Richard Clark, KB7QHC

2868. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:22:44 UTC
From: richardharrison@webtv.net
Message-ID: <20734-413B5974-66@storefull-3257.bay.webtv.net>
Source record: 89890

Richard Fry wrote:
"I also vaguely note some inference of peduliar intermodulation products that would be produced by a transmitter with 50 Ohm output characteristics---"

First transmitting plant I worked in back in 1949 was that of KPRC / KXYZ. These each used an RCA 5-C. Transmitters were 250-watt exciters driving 5 KW water cooled linear final amplifiers. The interesting thing about this plant was that the 950 KHz and 1320 KHz transmitters both fed a common main antenna. Each station had its own directional tower on the side.

The way to avoid intermodulation is to keep the foreign signals out of the electronics so they don`t mix. Well designed and adjusted pass/reject fikters in the transmission circuits of KPRC and KXYZ saw to that.

Best regards, Richard Harrison, KB5WZI

2869. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:30:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chfm0t$2oq$1@hercules.btinternet.com>
Source record: 89889

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:246mj0d84t4t8cp2usfi62vessva3ulm9o@4ax.com...
> On Sun, 5 Sep 2004 12:18:09 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> |What's a directional coupler?
> |What do they look like?
> |Don't bother answering those questions.
> |
> |Why do the arguers, when caught in a tight corner, always escape to UHF
for
> |help from directional couplers?
> |
> |There are NO directional couplers at HF. They are as scarce as real swr
> |meters. So they cannot be used in futile attempts to explain what really
> |happens at HF.
> |
> |You're next move will be to drag in scattering-matrices.
>
> Why not. I have used an HP3577 network analyzer with an S-parameter
> test set that was specified to work over the frequency range of 100 Hz
> to 200 Mhz.
>
> I guess the guys at HP didn't realize that you can't do this.

==========

Wes,

Why do USA citizens invariably introduce the type numbers of their
favourite, indeed worshipped articles when they have not the slightest
bearing on an argument. To base one's position on a lifeless piece of
hardware rather than logic is surely unsafe.

What on Earth is an HP3577? In the whole of my career I have never heard of
the number 3577. Is it a prime? Traditionally, in the UK, the letters HP
on the side of a savoury sauce bottle stand for "Houses of Parliament".

Unless a 3577 can unambiguously measure the swr on a non-existent
transmission line I'm afraid its presence will serve only to further
agravate the argument. Which I'm sure is the last thing you would want. ;o)

Can it?

Reg, G4FGQ

2870. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:46:52 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <waJ_c.2014$PK3.1264@trnddc08>
Source record: 89891

"Bill Turner" <noway@nohow.com> wrote in message
news:n7amj0d0ggahle2dh3vc8h9ji6m2oatdf4@4ax.com...
> On Sun, 05 Sep 2004 00:02:26 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
> >This will be sad news to all the V/U weak signal ops who have
consistantly
> >covered long distances using horizontal polarity.
>
> --
>
> This fellow was planning to put his antenna on the roof of a car.
> Presumably he is *not* DXing.
>
> I was therefore speaking of groundwave coverage, not any kind of skip,
> and what I stated holds true; for local groundwave, vertical is best.
>
> DXers, on the other hand, use horizontal precisely because the local
> groundwave coverage is poor, thereby reducing local QRM but having
> little or no effect on skip signals.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

I wasn't talking about skip either- the majority of V/U weak signal work is
extended ground wave via perhaps enhanced tropo.

1.Horizontal polarity can take advantage of ground gain reflection that
vertical polarity cannot.

2. In addition, at 900 MHz where a wavelength is just over a foot, even
mounting the antenna at 12" would place the first lobe at 15 degrees,
assuming the car roof completely determines this- and I doubt that it has
much of an effect on far field take off angle.

Dale W4OP

2871. CX-1051 Coaxial relay

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 18:58:23 UTC
From: 9A4QV Adam <aalicaj@pfri.hr>
Message-ID: <chfnif$ct4$1@bagan.srce.hr>
Source record: 89892

Does anybody know anything about this small coaxial relay (max power,
frequency etc.)
CX-1051
Thanks a lot in advance,

Adam, 9A4QV

2872. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 19:06:01 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q16ckFqks38U1@uni-berlin.de>
Source record: 89893

"Richard Harrison" wrote
> Richard Fry wrote:
> "I also vaguely note some inference of peduliar intermodulation products
> that would be produced by a transmitter with 50 Ohm output
> characteristics---"

How do find it justified to assign a literal quote to me that I did not write in the first place?

RF

2873. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 19:13:36 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q16qsFqcosvU1@uni-berlin.de>
Source record: 89894

"Richard Clark" wrote
authority - far more desperate than
> a punt.
>
> ...So,to this point you have failed to offer ... personal experience
> at the bench to support your thesis...

Incorrect. See my post earlier today about reflection measurements I made of TV transmit antenna systems. That's better than the bench. It's real life. The thesis has been proven.

> Even in the comedic foray you are seriously mismatched.

An arena in which I don't (and don't wish to) compete, however.

RF

2874. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 19:24:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chfp4imnb1@sparta.btinternet.com>
Source record: 89895

Gentlemen, excuse me butting in.

I suspect all these learned articles to be invalid because the authors incorrectly assume the source impedance to be constant and the load impedance to be the variable in any analyses or sets of measurements.

Whereas the internal or source impedance is actually a function of the load (and many other factors).

I have not read these papers or articles but base my comments on what I have gleaned from newsgroup conversations over the years.

In brief, how can you have a conjugate match with the source impedance hopping about trying to follow the load? ;o)

Reg, G4FGQ

==========

> You assume he refers to the source impedance of/at output of the
amplifier.
> More likely he is following convention and stating the load impedance that
> the amplifier was designed to work into.
>
> The source impedance of most transmitters is not published even today. If
> it was, probably we wouldn't be having all of this confusion about it, and
> its effects.
>

2875. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 19:53:47 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q1967Fq4tohU1@uni-berlin.de>
Source record: 89896

"Richard Harrison" wrote
> The way to avoid intermodulation is to keep the foreign signals
> out of the electronics so they don`t mix. Well designed and
> adjusted pass/reject fikters in the transmission circuits of
> KPRC and KXYZ saw to that.

Thanks. You report more evidence that the source impedance did not match the load impedance of these txs. If they did, each of these txs would absorb the coupled signal of the other -- and neither of them would generate mixing products.

RF

2876. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 20:39:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sotmj0pe6h74ui2g75n6b8pmu2gbresu4s@4ax.com>
Source record: 89897

On Sun, 5 Sep 2004 14:13:36 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>The thesis has been proven.

Hi OM,

It's always fun to find in the heat of discussion an opponent who
impeaches his own witnesses. This is like how Reggie abandons Lords
Kelvinator and Plushbottom to their graves when a troll is so much
more entertaining with that glass of wine. Such are the vagaries of
esteem so lightly held by gossamer minds.

It has been quite amusing. :-)

73's
Richard Clark, KB7QHC

2877. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 20:55:21 UTC
From: richardharrison@webtv.net
Message-ID: <6571-413B7D39-94@storefull-3256.bay.webtv.net>
Source record: 89898

Richard Fry wrote:
"How do (you) find it justified to assign a literal quote to me that I did not write in the first place?"

A mistake?

Sorry if I misquoted Richard Fry on peculair intermodulation products.

The power hungry RCA 5 C`s with their linear amplifiers were later replaced with RCA BTA5F`s which had Class C final amplifiers. Despite a phony ceremonial switchover to the new equipment in which pads were pulled from the audio lines to the new transmitters, the stations really sounded the same before and after the equipment change.

Best regards, Richard Harrison, KB5WZI

2878. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 21:07:02 UTC
From: richardharrison@webtv.net
Message-ID: <6571-413B7FF6-95@storefull-3256.bay.webtv.net>
Source record: 89899

Reg, G4FGQ wrote:
"In brief, how can you have a conjugate match with the source impedance hopping about trying to follow the load?"

I think you take control of the process and tune for maximum smoke.

Best regards, Richard Harrison, KB5WZI

2879. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 21:44:20 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <u71nj0tu452liggmrd8fjs0op68v52n105@4ax.com>
Source record: 89900

On Sun, 5 Sep 2004 07:49:06 -0500, "Richard Fry" <rfry@adams.net> wrote:
snip
>Walter Maxwell wrote
>> The last sentence in the paragraph above is incorrect. This shows that
>> the writer of the quote is in the unbelievably large group that still
>believes
>> incorrectly that half of the tx power would be lost if if it were
>conjugately
>> matched. But we all know that efficiencies greater than 80% is achieved
>> by Class C amps, and greater than 60% is achieved by Class B amps
>> when the source impedance of the tx is 50 ohms resistive and the load
>> impedance is also 50 ohms resistive.
>_____________
>
>To Walter Maxwell:
>
>1. You may be interested in reading Mendenhall's complete paper, which I
>will email to you. The lab measurements reported in it used two, operating,
>high-power FM broadcast transmitters -- and support his statements about
>amplifier source impedance and its consequences.
>
>2. I will ask again, if transmitters have a 50 ohm source impedance, what
>accounts for the fact that TV ghosts are produced by an antenna system
>reflection having a sufficient delay time? Calculations and measured data
>show that the energy that produced the ghost originated by re-reflection off
>the TV transmitter output stage of far-end reflections in the antenna
>system. If the tx source impedance was 50 ohms, it would absorb the far-end
>reflection, which would be incapable of producing a ghost image.
>
>Further, if the tx source impedance was 50 ohms, then the RF intermodulation
>measured and reported in Mendenhall's paper -- and verified in real-world
>installations by the radiated interference those IM products produced --
>would not occur.
>
>RF
Thank you Rick, I've received the Mendenhall paper, which I'll review and
comment later. However, before reading it I have one comment. On the condition
that the tx has tubes (and I assume it does) with some sort of LC output
coupling network, then if the source impedance of the tx is 50 ohms it will not
absorb the far-end reflection, because the source impedance of this type of tx
is not absortive. The source impedance of a resonant tank circuit is a
resistance determined by the voltage-current ratio in the tank--high resistance
at the tank input and low resistance at the output. The resistance being
proportional to the load line there is no dissipating resistor involved. The

only dissipative resistance in the system is the cathode-plate resistance, which is separate from the output resistance. And contrary to what I've skimmed in the Mendenhall paper, the output circuit of the tx is linear, not non-linear as Mendenhall says, because the energy storage of the tank isolates the non-linear input from the linear output. Remember, the tx output is a nearly perfect sine wave.

I'll not comment further on this point, Rich, until I've reviewed the Mendenhall paper.

2880. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 22:01:14 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q1gl6Fq4256U1@uni-berlin.de>
Source record: 89901

"Walter Maxwell"
> Thank you Rick, I've received the Mendenhall paper, which
> I'll review and comment later. (etc)

Thanks for your very civil response. I was on Geoff Mendenhall's staff for some years before I retired, and will contact him to ask for his response to whatever of your points seem appropriate for that. He's a very busy person these days and may not have the time to get involved, but there's no harm in trying.

RF

2881. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 23:38:50 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <6f8nj0da0ar7aoqksgquvdeig773qrlp8q@4ax.com>
Source record: 89902

On Sun, 5 Sep 2004 14:53:47 -0500, "Richard Fry" <rfry@adams.net>
wrote:

|"Richard Harrison" wrote
|> The way to avoid intermodulation is to keep the foreign signals
|> out of the electronics so they don`t mix. Well designed and
|> adjusted pass/reject fikters in the transmission circuits of
|> KPRC and KXYZ saw to that.
|_____________
|
|Thanks. You report more evidence that the source impedance did not match the
|load impedance of these txs.

|If they did, each of these txs would absorb
|the coupled signal of the other -- and neither of them would generate mixing
|products.

Why would they? One is tuned to 950 KHz, the other to 1320 KHz, a
good part of an octave difference.

This is the same fuzzy logic that says that you can measure the output
Z of an amplifier at one frequency by injecting another signal at a
different frequency.

If it was this easy, the bother of load pull techniques wouldn't have
become popular and the norm.

2882. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-05 23:48:09 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <159nj0lfq77o2qvte3httofiisgttkop3b@4ax.com>
Source record: 89903

On Sun, 5 Sep 2004 19:24:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|Gentlemen, excuse me butting in.

Not at all, after all, you started this mess.
|
|I suspect all these learned articles to be invalid because the authors
|incorrectly assume the source impedance to be constant and the load
|impedance to be the variable in any analyses or sets of measurements.
|
|Whereas the internal or source impedance is actually a function of the load
|(and many other factors).
|
|I have not read these papers or articles but base my comments on what I have
|gleaned from newsgroup conversations over the years.

What a hoot. You constantly battle old wives and then say that you
base your comments on newsgroup conversation!
|
|In brief, how can you have a conjugate match with the source impedance
|hopping about trying to follow the load? ;o)

Iteration.

2883. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 00:12:37 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jnarmeupefob1@corp.supernews.com>
Source record: 89904

Richard Fry wrote:
> "Roy Lewallen" wrote:
>
>>Sorry, it still isn't clear.
>>
>>What, then, is "system SWR"? How do you define it?
>
>
> System SWR is the net SWR of a component assembly present at its input
> terminals. "Antenna system SWR" then is comprised of the net SWR of
> everything in the RF path from the output of the SWR meter to and including
> the antenna. In a transmitter, the antenna system begins electrically at
> the output of the SWR meter -- physically close to the output connector of
> the tx.

You've still lost me. Let's say the "component assembly" is a half wavelength of 75 ohm transmission line terminated with a 75 ohm resistor. What is its "net SWR"? How about a half wavelength of 75 ohm line terminated with 50 ohms? Or a plain 75 ohm resistor? You surely have an equation you use to calculate "system SWR" or "net SWR" -- can you share it with us?

This is getting more complicated rather than simpler. We now have "true SWR", "antenna system SWR", and "net SWR". Quite a step from the ratio of maximum to minimum voltages on a transmission line.

> . . .

Roy Lewallen, W7EL

2884. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 00:14:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jnavficopus1e@corp.supernews.com>
Source record: 89905

Richard Fry wrote:
> . . .
> The source impedance of most transmitters is not published even today. If
> it was, probably we wouldn't be having all of this confusion about it, and
> its effects.
>

Who's confused? It has no effect.

Roy Lewallen, W7EL

2885. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 00:25:31 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <hpWdnRfHGb_uM6bcRVn-jg@comcast.com>
Source record: 89906

"Bob Nielsen" <nielsen@removethis.oz.net> wrote in message
news:chfkhi$4rf$0$216.39.144.81@theriver.com...
> (Jumping in after this argument has gone on for a long time)
>
> This has evolved somewhat into an "apples and oranges" discussion. What
> Richard Fry appears to be concerned with is the reflection of a video
> pulse by the load (antenna) and its re-reflection (at a later time,
> dependent on the length and Vp of the transmission line) by the source
> (transmitter) and subsequent radiation (as a ghost image--the effect
> repeats, ad infinitum).
>
> While this is certainly a real phenomenon, its effect is a function of
> both the mismatch at the load (S11) and the mismatch looking from the
> transmission line back toward the source (S22). It does NOT influence
> the VSWR and could, obviously, be significantly reduced by the use of a
> circulator at either end of the transmission line (which may not be
> practical at the power levels of televison transmitters, to use his
> example.)
>
> 73,
> Bob Nielsen, N7XY

To shed more light on this, when I tried to find information in the literature about transmitter output impedance, I ran across two cases where reflections from the transmitter are bad. One was the case of multiple transmitting antennas on one tower; a particular antenna could pick up another transmitter, and then re radiate it with some delay. The second was the case of a wide band spread spectrum transmitter, where it is not possible to have a good antenna match on all frequencies.

Tam/WB2TT

2886. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 01:22:00 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <86enj0142nrrda3ojqgtt28mj777dbq0i4@4ax.com>
Source record: 89907

On Sun, 5 Sep 2004 12:47:45 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Fry wrote:
>"At least there appears to be an acknowledgement that some RF amplifiers
>do not have a source impedance that is the conjugate of their load
>impedance."
>
>Those may be anomalous. I recommend King, Mimno, and Wing to anyone
>desiring the complete story on the conjugate matches.
>
>To the extent that the amplifier is designed for a performance on demand
>that stresses it to its maximum safe dissipation, an amplifier of the
>Class C variety is designed for a perfectly matched load. It`s the
>economical thing to do.
>
>You supply the tube with about all the volts it can safely take. Then
>you supply it with just enough load impedance to limit its current to
>all it can take under the heaviest loading it well encounter. That would
>be when it is conjugately matched to a 50-ohm load, the usual cable
>impedance specification.
>
>The tank circuit is mostly a harmonic filter providing a very high
>impedance to the fundamental frequency and shorting out the harmonics.
>
>Best regards, Richard Harrison, KB5WZI

Gotta' disagree here, Richard, conjugate matching a Class C tube amp doesn't require the heaviest loading it will encounter. A conjugate match can be obtained with any loading you choose. For example, you can set the drive that will permit loading to any particular level of maximum output power into any load within the tank circuit's available matching range. So let's assume you set the drive to provide a max output of 100 w into a 50-ohm load by adjusting the tank controls for maximum output. The source resistance is now 50-ohms, there is a conjugate match, and the amplifier has not been loaded to the heaviest loading it will encounter. In addition, if the load was 70 ohms and the tank adjusted for maximum output, the source resistance would now be 70 ohms, and there'd also be a conjugate match.

If you question my statements above see the data from my measurements using professional grade instruments in either QEX, May/Jun 2001, Chapter 19 in Reflections II, or from my web page at http://home.iag.net/~w2du.

Walt

2887. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 01:23:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mjcnj05gsomqn9obvfrpps0mll9epbp5lk@4ax.com>
Source record: 89908

On Sun, 5 Sep 2004 20:25:31 -0400, "Tam/WB2TT" <t-tammaru@c0mca$t.net>
wrote:

>when I tried to find information in the
>literature about transmitter output impedance, I ran across two cases where
>reflections from the transmitter are bad.

Hi All,

It doesn't take much research into the matter of matching and Harris
Transmitters to find from their Digital AM stations:

The newest Harris AM Transmitters of 10 KW and higher (up to 1
megawatt and more) are totally solid state and use a completely
different modulation system called Digital AM Modulation. This
scheme is another Harris Patented system, using a large quantity
of plug-in modules, each one generates RF at a different
modulation level; in order for this to function, any incoming
audio (if analog) is broken down into digitized data, then used to
drive the various modules at the varying levels needed to have an
amplitude modulated output. It sounds pretty simple, in fact,
each module has a torroid (coil) which is the load for that
module; all those torroids are lined up and an iron pipe is run
through these torroids so that the combined output of all the
modules is coupled into this pipe. One end of the pipe is at
ground, the other end is the RF output of the transmitter. There
is an output network to match impedance of the pipe, which is
probably only a few Ohms, to the required output impedance which
is usually 50 Ohms, although sometimes high power transmitters are
set up to provide 75 Ohms, once in a while even 300 Ohms, to drive
an open wire type transmission line system.

Hardly a wit difference between Geoff's first FM amplifier design that
was documented for FCC type acceptance and now when it comes to
matching - all very commonplace and not even a hair out of place in
the conventional wisdom found in Terman (one of his references).

As for the specification for output impedance gone missing :-)
MW-10B SPECIFICATIONS
RF OUTPUT IMPEDANCE: 50 ohms, unbalanced.
Other output impedances available on special order.

Harris Platinum Z FM transmitter
100 ohm output impedance (unbalanced)

HARRIS SW-50 A
RF Output Impedance 300 ohms balanced, 2.0 to 1 maximum VSWR

Well, instead of reciting their complete catalogue, it is easier to simply say I could not find any product that did not specify an output impedance, much less that others were available on special order.

One wonders if it doesn't matter, do they just change the spec page and the sticker above the connector? ;-)

73's
Richard Clark, KB7QHC

2888. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 01:37:39 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <69fnj0ttibm514tnejjsfrorl427204p6t@4ax.com>
Source record: 89909

On Sun, 5 Sep 2004 10:44:04 -0500, "Richard Fry" <rfry@adams.net> wrote:

>snip
>When this test shows a 5% pulse return 2 ï¿½s after the incident pulse time
>(for example), then the same pulse passed through the tx also shows nearly
>exactly the same reflection % and time separation -- assuming there is
>enough RF delay in the system for the reflection to be resolved in the
>demodulated waveform.
>
>As the directional coupler driving the normal demodulator at the TV station
>is looking at forward power only, it is clear that the reflection from the
>far end of the antenna system has been re-reflected from the TV tx output
>stage, and NOT absorbed by it in its "conjugate impedance."
>
>RF
>

Rich, I've got to tell you that you've just proved that the output circuitry of the tx doesn't absorb the reflection from the antenna, but instead, re-reflects it, because the output source resistance is not dissipative, only the cathode to plate resistance is dissipative.

And the output source resistance is not dissipative or absorptive if the impedance match is 'conjugate'. Contrary to what Mendenhall said that the tx would absorb half the power if the source resistance is 50 ohms, there is nothing special about the conjugate relationship that would produce this effect. The tx will re-reflect whatever the match relationship is between the tx and its load.

Walt

2889. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 01:58:21 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <o7gnj0life3n51vor8jaf4msocbaroc5br@4ax.com>
Source record: 89910

On Sun, 5 Sep 2004 17:01:14 -0500, "Richard Fry" <rfry@adams.net> wrote:

>"Walter Maxwell"
>> Thank you Rick, I've received the Mendenhall paper, which
>> I'll review and comment later. (etc)
>_____________
>
>Thanks for your very civil response. I was on Geoff Mendenhall's staff for
>some years before I retired, and will contact him to ask for his response to
>whatever of your points seem appropriate for that. He's a very busy person
>these days and may not have the time to get involved, but there's no harm in
>trying.
>
>RF

Hi Rich, it's interesting that you were on Geoff's staff. On the paper you sent me, the location of the company appears as Quincy, IL. When I bought the tx for new BC stn WCEN in 1948 it was from Gates Radio in Quincy. Is it possible that Geoff's business is a spinoff from Gates?

It's also interesting that you were also with RCA BC Div. I was with the RCA Labs in Princeton, and working with me in the same lab room in 1960 was Don Peterson, who was running an experiment suggested by Dr. George Brown. The experiment was in developing the use of TDR for finding discontinuities in RF feed lines for TV. With the success of his experiments we could pinpoint the location of a discontinuity that produced a reflection causing no greater than 1.03 SWR. He developed a kit for use in the field for locating ghost problems in the lines connecting the tx to the antenna. Were you aware of Don's work in this area?

Walt

2890. Re: Egg insulators

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 02:03:12 UTC
From: garigue <garigue@comcast.net>
Message-ID: <AzP_c.300444$eM2.213133@attbi_s51>
Source record: 89911

> After buying them, I am thinking I would just be better off with a
> knot. See:
> http://www.bunganutlake.org/windonwire-knot.htm
>
> Ken

Hi there Ken ...probably under most conditions that or similar a non-typical or traditional approach would work. Thanks for the page ...I have used a palomar knot for years for connecting the line to a swivel as it aides in the knot taking the direct stress and failing prematurely.

73 God Bless Tom KI3R

2891. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 02:06:03 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <lcgnj01ml64e0b059vfrqjsr5etn435pm0@4ax.com>
Source record: 89912

On Sun, 5 Sep 2004 18:30:53 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|
|"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
|news:246mj0d84t4t8cp2usfi62vessva3ulm9o@4ax.com...
|> On Sun, 5 Sep 2004 12:18:09 +0000 (UTC), "Reg Edwards"
|> <g4fgq.regp@ZZZbtinternet.com> wrote:
|>
|> |What's a directional coupler?
|> |What do they look like?
|> |Don't bother answering those questions.
|> |
|> |Why do the arguers, when caught in a tight corner, always escape to UHF
|for
|> |help from directional couplers?
|> |
|> |There are NO directional couplers at HF. They are as scarce as real swr
|> |meters. So they cannot be used in futile attempts to explain what really
|> |happens at HF.
|> |
|> |You're next move will be to drag in scattering-matrices.
|>
|> Why not. I have used an HP3577 network analyzer with an S-parameter
|> test set that was specified to work over the frequency range of 100 Hz
|> to 200 Mhz.
|>
|> I guess the guys at HP didn't realize that you can't do this.
|
|================================
|
|Wes,
|
|Why do USA citizens invariably introduce the type numbers of their
|favourite, indeed worshipped articles when they have not the slightest
|bearing on an argument. To base one's position on a lifeless piece of
|hardware rather than logic is surely unsafe.

Well, I cannot speak for all US citizens and *invariably* is a little
too all encompassing for me. But I suppose it's similar to declaring
so unequivocally and "logically" that there are NO directional
couplers at HF. When presented with a real-life instrument that
includes these non-existant couplers that you refer to, you wish to
attack and belittle the presenter.

If you don't know what an HP 3577 is, you might ask in a civil manner,
in which case I would say that it is a vector network analyzer,
covering the frequency range of 5 Hz to 200 MHz that was widely used
in this country as well as around the world.

An accessory to the instrument is an S-parameter test set that offered
the ability to measure full two-port parameters over the frequency
range of 100 Hz to 200 MHz, which last time I checked, includes the hf
spectrum.

|What on Earth is an HP3577?

See above.

|In the whole of my career I have never heard of
|the number 3577.

Clearly, you have lived a sheltered professional life.

|Is it a prime? Traditionally, in the UK, the letters HP
|on the side of a savoury sauce bottle stand for "Houses of Parliament"

Perhaps, but me thinks that the sauce that you are more familiar with
says something different.
|
|Unless a 3577 can unambiguously measure the swr on a non-existent
|transmission line I'm afraid its presence will serve only to further
|agravate the argument.

Surprising to you perhaps, yes it can.

2892. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 02:14:00 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <b4hnj0lckescag5qkhsu32ta89q7ide6k5@4ax.com>
Source record: 89913

On Sun, 5 Sep 2004 19:24:02 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:
>snip

>In brief, how can you have a conjugate match with the source impedance
>hopping about trying to follow the load? ;o)
>----
>Reg, G4FGQ
>
Reg, I have a myriad of measurements which prove that when the pi-network is adjusted to deliver max power for any reasonable drive level into any reasonable value of load, the source impedance is the conjugate of the load impedance. When adjusting the load control of the network for max output the output resistance equals the resistance of the load. And when the plate tuning is adjusted for max out the reactance injected into the network equals the reactance opposite to that in the load. To be practical, be assurred that the tuning and loading controls are alternately adjusted continuously until they converge and the max power is delivered.

Having performed these measurements many, many times, I assure you that the resulting data isn't a series of coincidences. So instead of the source impedance 'hopping about trying to follow the load', when the network is correctly adjusted, the source impedance 'finds' the load and stays put until the load is changed and the network readjusted to accomodate the new load.

Walt

2893. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 02:51:57 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <gjinj0li2n65aa0f4fdqmana52fedtg8pj@4ax.com>
Source record: 89914

On Mon, 06 Sep 2004 01:23:04 GMT, Richard Clark <kb7qhc@comcast.net> wrote:

>On Sun, 5 Sep 2004 20:25:31 -0400, "Tam/WB2TT" <t-tammaru@c0mca$t.net>
>wrote:
>
>>when I tried to find information in the
>>literature about transmitter output impedance, I ran across two cases where
>>reflections from the transmitter are bad.
>
>Hi All,
>
>It doesn't take much research into the matter of matching and Harris
>Transmitters to find from their Digital AM stations:
>
> The newest Harris AM Transmitters of 10 KW and higher (up to 1
> megawatt and more) are totally solid state and use a completely
> different modulation system called Digital AM Modulation. This
> scheme is another Harris Patented system, using a large quantity
> of plug-in modules, each one generates RF at a different
> modulation level; in order for this to function, any incoming
> audio (if analog) is broken down into digitized data, then used to
> drive the various modules at the varying levels needed to have an
> amplitude modulated output. It sounds pretty simple, in fact,
> each module has a torroid (coil) which is the load for that
> module; all those torroids are lined up and an iron pipe is run
> through these torroids so that the combined output of all the
> modules is coupled into this pipe. One end of the pipe is at
> ground, the other end is the RF output of the transmitter. There
> is an output network to match impedance of the pipe, which is
> probably only a few Ohms, to the required output impedance which
> is usually 50 Ohms, although sometimes high power transmitters are
> set up to provide 75 Ohms, once in a while even 300 Ohms, to drive
> an open wire type transmission line system.
>
>Hardly a wit difference between Geoff's first FM amplifier design that
>was documented for FCC type acceptance and now when it comes to
>matching - all very commonplace and not even a hair out of place in
>the conventional wisdom found in Terman (one of his references).
>snip
>Well, instead of reciting their complete catalogue, it is easier to
>simply say I could not find any product that did not specify an output
>impedance, much less that others were available on special order.
>
>One wonders if it doesn't matter, do they just change the spec page

>and the sticker above the connector? ;-)
>
>73's
>Richard Clark, KB7QHC

To Rich Fry,

Rich, I just now saw Richard Clark's post above. Until reading it I was totally unaware that high-power BC transmitters used solid-state final amps.

Consequently, my comments were all directed toward tx's using tubes and LC networks to isolate the non-linear input from the linear output. I'm not at all familiar with the circuitryused in solid-state amps, please interpret my comments accordingly.

Walt

2894. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 02:59:59 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <0cknj0ldnqskpu1fk5bhqnconm9oarsugt@4ax.com>
Source record: 89915

On Sun, 05 Sep 2004 19:06:03 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:

>|> On Sun, 5 Sep 2004 12:18:09 +0000 (UTC), "Reg Edwards"
>|> <g4fgq.regp@ZZZbtinternet.com> wrote:
>|>snip
>|> |There are NO directional couplers at HF. They are as scarce as real swr
>|> |meters. So they cannot be used in futile attempts to explain what really
>|> |happens at HF.
>|> |
>|> |You're next move will be to drag in scattering-matrices.
>|>
>|> Why not. I have used an HP3577 network analyzer with an S-parameter
>|> test set that was specified to work over the frequency range of 100 Hz
>|> to 200 Mhz.
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>|> I guess the guys at HP didn't realize that you can't do this.
>|
>|================================
>|
>|Wes,
>|
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>|favourite, indeed worshipped articles when they have not the slightest
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>|In the whole of my career I have never heard of
>|the number 3577.
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>|on the side of a savoury sauce bottle stand for "Houses of Parliament"
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>|transmission line I'm afraid its presence will serve only to further
>|agravate the argument.
>
>Surprising to you perhaps, yes it can.
>
And Reg, in conjunction with the HP-8405 Vector Voltmeter, the HP-778D dual directional coupler can measure SWR from 1 MHz to 1 GHz with no transmission line whatever. This combination is the workhorse of my RF Lab.

Walt

2895. Re: Osama Bin Ladin Found Hanged

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 03:11:02 UTC
From: Steve <lafayetteradio4@optonline.net>
Message-ID: <413BD637.73422DE1@optonline.net>
Source record: 89916
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

OH NO, THEY HUNG HIM AGAIN??
ANOTHER ANAL ATTEMPT TO INFECT YOUR MACHINES!
These A-HOLES should also be hung!!

benfranklin@harvard.edu wrote:

> Osama Bin Ladin was found hanged by two CNN journalists early Wedensday evening. As evidence they took several photos, some of which i have included here. As yet, this information has not hit the headlines due to Bush wanting confirmation of his identity but the journalists have released some early photos over the internet which can be found here http://www.theparadise.x-y.net

2896. Re: Osama Bin Ladin Found Hanged

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 03:30:13 UTC
From: NO SPAM <NOSPAM@NOSPAM.COM>
Message-ID: <WSQ_c.742$Ae.485@newsread1.dllstx09.us.to.verio.net>
Source record: 89917
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

Hung? THEY NEED SHOT.....

"Steve" <lafayetteradio4@optonline.net> wrote in message
news:413BD637.73422DE1@optonline.net...
> OH NO, THEY HUNG HIM AGAIN??
> ANOTHER ANAL ATTEMPT TO INFECT YOUR MACHINES!
> These A-HOLES should also be hung!!

2897. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 06:51:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jo271ktuh542a@corp.supernews.com>
Source record: 89918

I sense there's still a failure to communicate.

If Dale means by "V/U" VHF and UHF, ground wave isn't a viable means of propagation anyway. The attenuation of ground waves increases with frequency, to the point that they're virtually useless at VHF and above. So at those frequencies, I'd think the polarization choice for short range communication would be based on how it affects attenuation, multipath, and QRM. Given those criteria, horizontal might well have an advantage for short range communication, in some locations at least. And it's long been favored for long range VHF/UHF communication.

Roy Lewallen, W7EL

Bill Turner wrote:
> On Sun, 05 Sep 2004 00:02:26 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
>
>>This will be sad news to all the V/U weak signal ops who have consistantly
>>covered long distances using horizontal polarity.
>
>
> ____
>
> This fellow was planning to put his antenna on the roof of a car.
> Presumably he is *not* DXing.
>
> I was therefore speaking of groundwave coverage, not any kind of skip,
> and what I stated holds true; for local groundwave, vertical is best.
>
> DXers, on the other hand, use horizontal precisely because the local
> groundwave coverage is poor, thereby reducing local QRM but having
> little or no effect on skip signals.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>

2898. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 07:00:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jo2on647qqna1@corp.supernews.com>
Source record: 89919

Dale Parfitt wrote:
>
> I wasn't talking about skip either- the majority of V/U weak signal work is
> extended ground wave via perhaps enhanced tropo.

Ground wave? Really? I admit I'm not a propagation expert, so I'd appreciate an explanation from someone who is. Is there really enough ground wave propagation at VHF/UHF to be useful for any purpose, even short range communication?

> 1.Horizontal polarity can take advantage of ground gain reflection that
> vertical polarity cannot.
>
> 2. In addition, at 900 MHz where a wavelength is just over a foot, even
> mounting the antenna at 12" would place the first lobe at 15 degrees,
> assuming the car roof completely determines this- and I doubt that it has
> much of an effect on far field take off angle.

You'd get that 15 degree lobe only if the roof extends far enough from the antenna to reflect a wave going out at an angle 15 degrees below the horizon (plus a bit, because the reflection doesn't actually take place from a single point). At 12" above the car roof, the 15 degree downward wave strikes the roof 12/tan(15 deg.) ~ 45 inches from the point below the antenna. So the the car roof would have to extend at least about 4 feet beyond the antenna in the direction you're sending in order to get that 15 degree lobe with the antenna 12" above the roof.

Roy Lewallen, W7EL

2899. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 07:02:14 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040906030214.16740.00000171@mb-m11.aol.com>
Source record: 89920

Have you tried an halo or loop antenna? M2 Antenna's and Par Electronics makes them. Homebrew plans are on the net.

The halo is a 1/2 wave dipole bent into a circle. Common designs use 1 turn, but 3 turn halo's have been used, with more gain. Stacking 2 halo's also provide additional gain. Weak signal operaters on VHF and UHF use them mobile on a regular basis.

Randy ka4nma

2900. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 07:26:20 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <BZUcrgIcEBPBFAnX@ifwtech.co.uk>
Source record: 89821

Roy Lewallen wrote:
>Dale Parfitt wrote:
>> I wasn't talking about skip either- the majority of V/U weak signal
>>work is
>> extended ground wave via perhaps enhanced tropo.
>
>Ground wave? Really? I admit I'm not a propagation expert, so I'd
>appreciate an explanation from someone who is. Is there really enough
>ground wave propagation at VHF/UHF to be useful for any purpose, even
>short range communication?
>
No, it isn't ground wave at all. It's just a loose way of saying "normal short-range VHF/UHF propagation" which is a complex combination of line-of-sight, diffraction and scattering.

At medium ranges - which can be several hundred miles between well-equipped stations - atmospheric refraction and scattering are the main mechanisms. When weather systems lead to an "opening", signal strengths and workable ranges are enhanced by much stronger refraction and ducting.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
Editor, 'The VHF/UHF DX Book'
http://www.ifwtech.co.uk/g3sek

2901. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 08:35:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chh7fm$p30$1@sparta.btinternet.com>
Source record: 89822

Hi Walter,

In MY kitchen I have two workhorses, comprising the -

Autek Research, RF Analyst, Model RF-1, Frequency range 1.1 - 36 Mhz

and the -

MFJ, HF/VHF SWR Analyser Model 259-B, Frequency range 1.8 - 170 MHz.

Both were made in the USA. I bought the 2nd one in the hope it might be
better than the first. It wasn't. Nevertheless, between them they are the
best things since sliced bread.

The last measurements made using them were of soil impedance vs frequency,
in the kitchen sink, on samples from my backyard.

And the accuracy of any instrument depends on how it is used rather than on
what the manufacturer says about it.

Reg, G4FGQ

==========

"Walter Maxwell" wrote
> And Reg, in conjunction with the HP-8405 Vector Voltmeter, the HP-778D
dual
> directional coupler can measure SWR from 1 MHz to 1 GHz with no
transmission
> line whatever. This combination is the workhorse of my RF Lab.
>
> Walt

2902. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 09:12:10 UTC
From: richardharrison@webtv.net
Message-ID: <10408-413C29EA-49@storefull-3251.bay.webtv.net>
Source record: 89823

Walter, W2DU wrote:
"Is it possible that Geoff`s business is a spinoff grom Gates?"

Harris Intertype Corporation, predecessor of Harris Electronics, axquired Quincy, IL`s Gates Radio in the 1950`s, I believe. Then Harris really hit the acquisition trail. It acquired R.F. Communications, a 2-way radio manufacturer. It also acquired a telephone and SCADA equipment manufacturer, which had a government equipment and semiconductor division in Florida. It acquired Farinon Electric a microwave manufacturer in California. There were other acquisitions, Lanier which made office equipment such as duplicators. It acquired a hardware manufacturer which made 19-inch equipment racks among its products. I don`t about other shuffles in Harris` portfolio of companies, but the companies it bought were among the best at what they did at the time of acquisition.

Best regards, Richard Harrison, KB5WZI

2903. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 09:34:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chhb01$h98$1@hercules.btinternet.com>
Source record: 89824

> >In brief, how can you have a conjugate match with the source impedance
> >hopping about trying to follow the load? ;o)
> >----
> >Reg, G4FGQ
> >
> Reg, I have a myriad of measurements which prove that when the pi-network
is
> adjusted to deliver max power for any reasonable drive level into any
reasonable
> value of load, the source impedance is the conjugate of the load
impedance. When
> adjusting the load control of the network for max output the output
resistance
> equals the resistance of the load. And when the plate tuning is adjusted
for max
> out the reactance injected into the network equals the reactance opposite
to
> that in the load. To be practical, be assurred that the tuning and loading
> controls are alternately adjusted continuously until they converge and the
max
> power is delivered.
>
> Having performed these measurements many, many times, I assure you that
the
> resulting data isn't a series of coincidences. So instead of the source
> impedance 'hopping about trying to follow the load', when the network is
> correctly adjusted, the source impedance 'finds' the load and stays put
until
> the load is changed and the network readjusted to accomodate the new load.
>
> Walt
==========

Walt, forgive me for stating the obvious, but when operating under
non-linear conditions, as tubes and transistors are, I think you'll agree
that when the load resistance is changed, the tubes operating conditions
also change, and so does the tube's internal resistance.

I don't know exactly how you have conducted your measurements. But I suggest
that when you change the load you automatically force the internal
resistance to change with it.

But in any case, whichever way the source changes, the basic idea of a
conjugate match to an unstable source is itself not very sound.

The best way of determining source impedance is to mathematically model and calculate it. It need not be accurate. It is necessary only to show that it does change.

Reg, G4FGQ

2904. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 10:01:15 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chhchb$3l7$1@sparta.btinternet.com>
Source record: 89825

"Walter Maxwell" wrote
> If you question my statements above see the data from my measurements
using
> professional grade instruments in either QEX, May/Jun 2001, Chapter 19 in
> Reflections II,
>
==========

The accuracy of measurements depends on who uses the instruments rather than on what the manufacturer says in his sales catalogue. I'd much prefer just to take your word for it, Walt. The manufacturer's type number is superfluous - it sounds like a gratuitous advert.

Reg, G4FGQ

2905. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 10:12:15 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <duK6zJB$fDPBFwXv@g3ohx.demon.co.uk>
Source record: 89826

In message <BZUcrgIcEBPBFAnX@ifwtech.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.co.uk> writes
>Roy Lewallen wrote:
>>Dale Parfitt wrote:
>>> I wasn't talking about skip either- the majority of V/U weak signal
>>>work is
>>> extended ground wave via perhaps enhanced tropo.
>>
>>Ground wave? Really? I admit I'm not a propagation expert, so I'd
>>appreciate an explanation from someone who is. Is there really enough
>>ground wave propagation at VHF/UHF to be useful for any purpose, even
>>short range communication?
>>
>No, it isn't ground wave at all. It's just a loose way of saying
>"normal short-range VHF/UHF propagation" which is a complex combination
>of line-of-sight, diffraction and scattering.
>
>At medium ranges - which can be several hundred miles between
>well-equipped stations - atmospheric refraction and scattering are the
>main mechanisms. When weather systems lead to an "opening", signal
>strengths and workable ranges are enhanced by much stronger refraction
>and ducting.
>
>

When I was a lad, I learned that the 'goundwave' requires the flow of current in the ground, and is intimately tied up with the ground conductivity. Its attenuation rises rapidly as frequency increases, so is essentially only a low-frequency phenomenon. It requires a vertical antenna.

Propagation at the higher frequencies is via 'spacewave', which has nothing to do with currents flowing in the ground.

Many years ago, there were lots of discussions about whether vertical or horizontal polarisation went further. In the UK, many of the (no longer used) VHF TV transmitters used vertical. I don't think that the US ever used vertical for TV. I think that the verdict eventually was that horizontal won by a very short head.

At UHF, horizontal is invariably used for the high power TV transmitters, and the low-power fill-ins nearly always use vertical. There is therefore little opportunity to make a practical comparison of which polarisation is consistently received at great distances - it's always horizontal.

As for short range mobile and portable communications, propagation relies so much on 'bouncing off things' that it probably doesn't matter. Circular is probably best, but vertical physically easier. I can't imagine why anyone would want to use horizontal.

Cheers,
Ian.
--

2906. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 10:15:36 UTC
From: richardharrison@webtv.net
Message-ID: <10408-413C38C8-50@storefull-3251.bay.webtv.net>
Source record: 89827

Walter, W2DU wrote:
"A conjugate match can be obtained for any loading you choose."

No doubt. A conjugate match permits maximum power transfer. No other load can extract as much output as a conjugate match. Were I designing a broadcast transmitter for a 50-ohm or a 75-ohm load, I would want my money`s worth from the output devices I`ve selscted, consistent with a long useful duration.

I`d design for a conjugate match at the rated load and include overload protection for an output short circuit or near short. For solid-state I`d provide overvoltage protection.in addition to overcurrent protection.

Harris solid-state medium wave transmitters have a number of amplifiers supplying the output and a faulty amplifier can be easily removed from service while the remainder continue operation almost as if nothing had happened, if I read their internet pages correctly.

Best regards, Richard Harrison, KB5WZI

2907. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 10:41:57 UTC
From: richardharrison@webtv.net
Message-ID: <23105-413C3EF5-218@storefull-3255.bay.webtv.net>
Source record: 89828

Reg Edwards, W4FGQ wrote:
"---when the load resistance is changed, the tube`s operating conditions also change, and so does the tube`s internal resistance."

I would think that change in operating conditions result from readjustment of the amplifier, not from changing the load on it.

Most of the output impedance of a Class C power amplifier tube does not come from the saturation resistance when switched on, but comes from the duration of the period in which it is switched off. Until you readjust drive, the on and off periods and even the saturation resistance of the tube remain unchanged.

Best regards, Richard Harrison, KB5WZI

2908. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 11:20:23 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q2vkaFqlr3iU1@uni-berlin.de>
Source record: 89829

"Richard Clark" wrote about the specs for Harris Broadcast Txs:
> As for the specification for output impedance gone missing :-)
> MW-10B SPECIFICATIONS
> RF OUTPUT IMPEDANCE: 50 ohms, unbalanced.
> Other output impedances available on special order.
> Harris Platinum Z FM transmitter
> 100 ohm output impedance (unbalanced)
> HARRIS SW-50 A
> RF Output Impedance 300 ohms balanced, 2.0 to 1 maximum VSWR
> Well, instead of reciting their complete catalogue, it is easier to
> simply say I could not find any product that did not specify an output
> impedance, much less that others were available on special order.

I won't try to soften this: your conclusion above doesn't just _appear_ to be wrong, it IS wrong. 100% wrong. The impedance published by Harris is the expected load impedance, not the tx source impedance -- which is the convention used by all OEMs of broadcast txs (at least).

How do I know? I was the author of all of the brochures and technical data sheets for Harris' entire FM product line for the ten years before I retired. That any published value of impedance applied to the load impedance expected was/is universal across the product lines: AM/FM/TV.

Your post above showing 100 ohms for a Platinum Z FM tx also is wrong. It is designed for a 50 ohm load. Here is a link to an on-line brochure for the current 10kW model:
http://www.broadcast.harris.com/product_portfolio/prod_media/HAR173569.pdf
Observe the statement at the bottom of the right column on the last page thereof, which I quote below for your convenience:

"All specifications referenced to any single output frequency
(87.5-108MHz),
nominal rated output power, and 50 ohm, isolated, non-reactive load."

No other RF impedance spec is given in the very detailed list of specs contained in these brochures.

Kindly recant your accusations.

RF

2909. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 11:37:37 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q30frFq8o2dU1@uni-berlin.de>
Source record: 89830

"Walter Maxwell" wrote to R. Fry:
> I'm not at all familiar with the circuitry used in solid-state
> amps, please interpret my comments accordingly.

Understand, and will keep that in mind. However I won't be reading/responding to anything for the next few days, as I'll be taking a short "R&R" trip.

RF

2910. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 11:51:01 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <2q318vFqts8kU1@uni-berlin.de>
Source record: 89831

"Walter Maxwell"
> When I bought the tx for new BC stn WCEN in 1948
> it was from Gates Radio in Quincy. Is it possible that
> Geoff's business is a spinoff from Gates?

Yes, Harris-Intertype (later just "Harris Corp") bought Gates Radio, lock, stock and barrel -- not a spinoff.

> Don Peterson, developing the use of TDR for finding discontinuities
> in RF feed lines for TV. He developed a kit for use in the field for
> locating ghost problems in the lines connecting the tx to the antenna.
> Were you aware of Don's work in this area?

Vaguely. My primary contact and mentor was Dr Matti Siukola, lead engineer at RCA's antenna lab and test range at Gibbsboro, NJ. Under his direction I was responsible for updating and improving the VHF and UHF RF pulse test sets used by RCA Field Service.

RF

2911. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 12:01:18 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <mZednf9PiJKdzKHcRVn-qQ@bright.net>
Source record: 89832

I use a horizontal omnidirectional antenna for 2M in the truck while working SSB. Most home-based 2M SSB stations run horizontal polarization (at least here in the USA). I use it to help avoid the 20 dB or so loss that occurs from crossed polarization.

Ian Jackson wrote:

>
> As for short range mobile and portable communications, propagation
> relies so much on 'bouncing off things' that it probably doesn't matter.
> Circular is probably best, but vertical physically easier. I can't
> imagine why anyone would want to use horizontal.
>
> Cheers,
> Ian.

--
Scott
http://corbenflyer.tripod.com/
Building RV-4
Gotta Fly or Gonna Die

2912. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 12:36:10 UTC
From: Ian Jackson <REMOVE-THIS-BIT@g3ohx.demon.co.uk>
Message-ID: <v4rWmlB6mFPBFwRP@g3ohx.demon.co.uk>
Source record: 89833

>Ian Jackson wrote:
>
>> As for short range mobile and portable communications, propagation
>>relies so much on 'bouncing off things' that it probably doesn't
>>matter. Circular is probably best, but vertical physically easier. I
>>can't imagine why anyone would want to use horizontal.
>> Cheers,
>> Ian.
>
In message <mZednf9PiJKdzKHcRVn-qQ@bright.net>, Scott
<acepilot@bloomer.net> writes
>I use a horizontal omnidirectional antenna for 2M in the truck while
>working SSB. Most home-based 2M SSB stations run horizontal
>polarization (at least here in the USA). I use it to help avoid the 20
>dB or so loss that occurs from crossed polarization.
>
>

Same here in the UK. However, SSB is generally associated with longer
distance working (for lots of reasons), and folks tend to have larger
antennas then for local ragchews on FM (often through a repeater). If
you have a large antenna, it's physically easier to make it horizontal
(eg fewer problems with mounting it and avoiding the mast). If you
regularly work the SSB guys, you would certainly want to use horizontal
when mobile, especially as SSB is much less forgiving than FM is to the
deep and rapid flutter that is accentuated by cross-polarisation.
However, I think it's not so much a case of 'wanting' to use horizontal,
it's more like 'having' to.
Ian.
--

2913. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 13:04:50 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0409060504.12f222fa@posting.google.com>
Source record: 89834

....just noticed these messages....

Thanks for the nice words !

Furthermore I can say I just got some inspiration and nice ideas for some new features. It could take a few weeks, but I would suggest to look at Ray's site some now and than for new versions.

Arie.

2914. Re: Osama Bin Ladin Found Hanged

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 13:21:08 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040906092108.287$L7@newsreader.com>
Source record: 89835
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

Steve <lafayetteradio4@optonline.net> wrote:
> OH NO, THEY HUNG HIM AGAIN??
> ANOTHER ANAL ATTEMPT TO INFECT YOUR MACHINES!
> These A-HOLES should also be hung!!
>
>
Hey, if you're going to keep posting the obvious, at least
snip the virus link. -sheesh-

2915. Re: Osama Bin Ladin Found Hanged

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 13:36:51 UTC
From: Steve <lafayetteradio4@optonline.net>
Message-ID: <413C68E5.35905097@optonline.net>
Source record: 89836
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment

AMEN!!

NO SPAM wrote:

> Hung? THEY NEED SHOT.........
>
> "Steve" <lafayetteradio4@optonline.net> wrote in message
> news:413BD637.73422DE1@optonline.net...
> > OH NO, THEY HUNG HIM AGAIN??
> > ANOTHER ANAL ATTEMPT TO INFECT YOUR MACHINES!
> > These A-HOLES should also be hung!!

2916. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 14:25:21 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <fKmdnVdQo-jV7qHcRVn-og@comcast.com>
Source record: 89837

Hi Richard,
I don't have anything to do with broadcasting, but when I first ran across their DX line of AM transmitters, it really blew my mind. It seems though, that it is really hard to find detailed info on them. Do you have a link that describes what happens in some detail. The best I have been able to come up with was anecdotal data let to from the WLW web site. There must be some article that was published in some trade magazine. My questions are:

The 50 KW transmitter supposedly has 60 some modules of about 1KW each. How does this jive with being able to get the 200KW PEP that is required for 100% upward modulation? Does the combiner add voltage or power? Seems like it would be voltage, but then the impedance a module sees would depend on how many are active at a given time.

What is the digital sampling rate? Seems to me they need a high power bandpass filter to get rid of the sampling frequency after the combiner.

BTW, I think a lot of people are going to confuse this with Digital AM.

Tam/WB2TT

"Richard Fry" <rfry@adams.net> wrote in message
news:2q2vkaFqlr3iU1@uni-berlin.de...
> "Richard Clark" wrote about the specs for Harris Broadcast Txs:
> > As for the specification for output impedance gone missing :-)
> > MW-10B SPECIFICATIONS
> > RF OUTPUT IMPEDANCE: 50 ohms, unbalanced.
> > Other output impedances available on special order.
> > Harris Platinum Z FM transmitter
> > 100 ohm output impedance (unbalanced)
> > HARRIS SW-50 A
> > RF Output Impedance 300 ohms balanced, 2.0 to 1 maximum VSWR
> > Well, instead of reciting their complete catalogue, it is easier to
> > simply say I could not find any product that did not specify an output
> > impedance, much less that others were available on special order.
> _____________
>
> I won't try to soften this: your conclusion above doesn't just _appear_ to
> be wrong, it IS wrong. 100% wrong. The impedance published by Harris is
the
> expected load impedance, not the tx source impedance -- which is the
> convention used by all OEMs of broadcast txs (at least).
>
> How do I know? I was the author of all of the brochures and technical
data
> sheets for Harris' entire FM product line for the ten years before I

> retired. That any published value of impedance applied to the load
> impedance expected was/is universal across the product lines: AM/FM/TV.
>
> Your post above showing 100 ohms for a Platinum Z FM tx also is wrong. It
> is designed for a 50 ohm load. Here is a link to an on-line brochure for
> the current 10kW model:
> http://www.broadcast.harris.com/product_portfolio/prod_media/HAR173569.pdf
> Observe the statement at the bottom of the right column on the last page
> thereof, which I quote below for your convenience:
>
> "All specifications referenced to any single output frequency
> (87.5-108MHz),
> nominal rated output power, and 50 ohm, isolated, non-reactive
load."
>
> No other RF impedance spec is given in the very detailed list of specs
> contained in these brochures.
>
> Kindly recant your accusations.
>
> RF
>
>

2917. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 14:39:54 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <XpednSfCy7It66HcRVn-sg@comcast.com>
Source record: 89838

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10jnavficopus1e@corp.supernews.com...
> Richard Fry wrote:
> > . . .
> > The source impedance of most transmitters is not published even today.
If
> > it was, probably we wouldn't be having all of this confusion about it,
and
> > its effects.
> >
>
> Who's confused? It has no effect.
>
> Roy Lewallen, W7EL

Hi Roy,

Going back to the Slick discussions of last winter, Was that you who made the statement that you can have 100% re reflection from a transmitter, even if it has a 50 Ohm output impedance? At first I thought this was all wet, but after making some low power experiments, I am convinced it is true.

Tam/WB2TT

2918. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 14:43:45 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <BI__c.2819$BQ4.164@trnddc06>
Source record: 89839

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10jo2on647qqna1@corp.supernews.com...
> Dale Parfitt wrote:
> >
> > I wasn't talking about skip either- the majority of V/U weak signal work
is
> > extended ground wave via perhaps enhanced tropo.
>
> Ground wave? Really? I admit I'm not a propagation expert, so I'd
> appreciate an explanation from someone who is. Is there really enough
> ground wave propagation at VHF/UHF to be useful for any purpose, even
> short range communication?
>
>Thank you for the reflection explaination Roy- the geometry makes perect
sense.

As for the ground wave- perhaps I am using the wrong term in describing the
regular (non enhanced) communications that takes place on 6M and up.
On 6M I can regularly work out to 300 miles or so w/o the aid of sporadic E,
aurora or other ionospherically propogated signals.
The ARRL Antenna Handbook describes ground wave as:
"...any wave that stays close to the earth, reaching the receiving point
without leaving the earth's lower atmosphere."

Kraus doesn't address VHF ground wave that I can see.

Perhaps scatter mode might be a better description- in this case tropo
scatter.

73,

Dale W4OP

2919. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 14:44:03 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chht3jcuh1@hercules.btinternet.com>
Source record: 89840

"Richard Harrison" wrote >
> I`d design for a conjugate match at the rated load and include overload
> protection for an output short circuit or near short. For solid-state
> I`d provide overvoltage protection.in addition to overcurrent
> protection.
>
==========

To obtain a conjugate match it is first necessary to know what the source impedamce is. How or from where is that elusive figure obtained?

It is not given in a transmitting tube manufacturer's data sheets. Perhaps it doesn't matter what it is - not needed?

Reg, G4FGQ

2920. Re: End insulators -- purpose?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 14:48:30 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <aqKdnXLFc8sj5aHcRVn-ow@adelphia.com>
Source record: 89841

Jack Painter wrote:
> "Jimmie" <Gfender@carolina.rr.com> wrote
>
>
>>"Ken" <cprstn54zz@att.net> wrote in message
>>news:3ms8j0tk2cuhlsr4d8dh1949ds5e0r835b@4ax.com...
>>
>>>Do I need a dogbone or egg insulator at each end of my dipole, or can
>>>I just splice the antenna wire to the nylon braid that runs to my
>>>trees?
>>>
>>>Is the answer different for, say, under 100 watts vs 1,000 watts? HF
>>>vs. VHF?
>>>
>>>I would probably put a small nylon thimble in the nylon braid to
>>>provide a decent radius for the wire end.
>>>
>>>Ken KC2JDY
>>
>>I ve done it with 500 watts up to 10 meters, No problems rain or shine.
>>
>
>
> And thus another radio-myth is dispelled....
>
> I doubt anyone disagrees that insulators which help support the radio
> apparatus industry, er, I mean the ends of the dipole, are "proper"
> connections. But I'll gladly show pictures to anyone who doubts that the
> (8.9 mhz length) 1/4 wave ends of my dipole are operating that way. And
> there is indisputable evidence I have operated this way at very long ranges
> during icestorms, torrential downpours, and even hurricanes. Never saw a
> noticeable variation in the consistent 1.1 to 1 SWR as indicated on the
> tuner. So the 30 odd feet of string holding the ends of the 8mhz components
> of the dipole are definitely not robbing it or shorting out.

Heck, I just nail the wires to the tree. I use a big screw if I'm
feeling fancy. ;^)

- Mike KB3EIA -

2921. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 14:52:27 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <LQ__c.2862$BQ4.1058@trnddc06>
Source record: 89842

"Theplanters95" <theplanters95@aol.comnospam> wrote in message
news:20040906030214.16740.00000171@mb-m11.aol.com...
> Have you tried an halo or loop antenna? M2 Antenna's and Par Electronics
makes
> them. Homebrew plans are on the net.
>
> The halo is a 1/2 wave dipole bent into a circle. Common designs use 1
turn,
> but 3 turn halo's have been used, with more gain. Stacking 2 halo's also
> provide additional gain. Weak signal operaters on VHF and UHF use them
mobile
> on a regular basis.
>
> Randy ka4nma

Two points of clarification. The PAR design is not a half wave antenna. It is longer than a half wave- that length combined with the isosceles triangle shape yields an excellent omni pattern and a bit more BW

The 3 loop haloes were not 3 turns. The loops were configured as a folded dipole in order to increase the inherently low feedpoint R (10-15 Ohms) of a single loop. There is no increase in gain from doing this.

Dale W4OP

2922. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 15:10:41 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <bI$KfGWx3HPBFAkm@ifwtech.co.uk>
Source record: 89843

Dale Parfitt wrote:
>The ARRL Antenna Handbook describes ground wave as:"...any wave that
>stays close to the earth, reaching the receiving point without leaving
>the earth's lower atmosphere."
>
That definition is very misleading at VHF, since normal tropospheric refraction takes place entirely in "the earth's lower atmosphere" but generally doesn't involve ground at all. It's a gradual bending of the space wave.

>Kraus doesn't address VHF ground wave that I can see.
>
>Perhaps scatter mode might be a better description- in this case tropo
>scatter.

That isn't quite it, either, because "scatter" has a specific meaning which doesn't fully apply to this complex (and varying) mixture of propagation modes. In fact, no attempt to label VHF/UHF propagation as one single mode can ever be correct.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2923. Re: Microphone help

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 15:23:10 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <yh%_c.8589$683.1019045@twister.southeast.rr.com>
Source record: 89844

"Charles Hampton KA8JVX" <hampton@wvnet.edu> wrote in message
news:41362962.110B@wvnet.edu...
> Jimmie wrote:
> >
> > I have an IC-229H 2M radio that I am using with a HM 56a microphone. The
> > radio keys as soon as I turn it on with the microphone connected. First
is
> > this the right mike to use with this radio. Been a few years since I
last
> > used it. The connector has been resoldered but I think I did this to fix
a
> > broken wire. Wiring diagram with wire colors, pin numbers would be most
> > helpful.Really think it is the right mike and dont really think it is
wired
> > wrong but both are possibilities, Any other help would also be
appreciated.
> >
> > Jimmie
> > kd4rqe
>
> Jimmie,
> If any of the touch tone buttons are sticking it will key the
> transmitter when you turn it on. I am assuming that the HM56 and HM56A
> are the same.
> If you need a manual for your 229 H, send me your mailing address and I
> will send you a copy free of charge. The file is too large to email.
>
> Charles, ka8jvx

Thanks Charles, I got the package Saturday. I did a reset on the microphone per the instuctions and it works fine now. There is one catch though. I went to the Shelby NC hamfest this weekend before I got your post and was able to purchase an entire IC-229 radio cheaper than I could get a replacement microphone. Now I have two and they are both fully functional.

2924. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 15:44:43 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c878c_4@corp.newsgroups.com>
Source record: 89845

Dale Parfitt wrote:
> As for the ground wave- perhaps I am using the wrong term in describing the
> regular (non enhanced) communications that takes place on 6M and up.

From the IEEE Dictionary:

"The ground wave can be decomposed into the Norton surface
wave and a space wave consisting of the vector sum of a
direct wave and a ground-reflected wave."

Looks like you are using the correct term and others may
not be.
--
73, Cecil http://www.qsl.net/w5dxp

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2925. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 15:52:33 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c8962$1_4@corp.newsgroups.com>
Source record: 89846

Ian White, G3SEK wrote:

> Dale Parfitt wrote:
>> The ARRL Antenna Handbook describes ground wave as:"...any wave that
>> stays close to the earth, reaching the receiving point without leaving
>> the earth's lower atmosphere."
>>
> That definition is very misleading at VHF, since normal tropospheric
> refraction takes place entirely in "the earth's lower atmosphere" but
> generally doesn't involve ground at all. It's a gradual bending of the
> space wave.

Yep, the IEEE Dictionary says the "ground wave" possesses a
space wave component. "From a source in the vicinity of the
surface of the Earth, a wave that would exist in the vicinity
of the surface in the absence of an ionosphere. The ground wave
can be decomposed into the Norton surface wave and a space wave
consisting of the vector sum of a direct wave and a ground-
reflected wave."
--
73, Cecil http://www.qsl.net/w5dxp

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2926. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 15:57:57 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c8aa6_4@corp.newsgroups.com>
Source record: 89847

Roy Lewallen wrote:

> I sense there's still a failure to communicate.
>
> If Dale means by "V/U" VHF and UHF, ground wave isn't a viable means of
> propagation anyway.

Maybe you could revise your definition of "ground wave" to
agree with the IEEE? The IEEE dictionary says the "ground wave"
is defined to be what would be left if we took away the ionosphere.
It says the ground wave *includes* a component of the space wave.
--
73, Cecil http://www.qsl.net/w5dxp

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2927. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 16:11:56 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c8dec_4@corp.newsgroups.com>
Source record: 89848

Reg Edwards wrote:
> And the accuracy of any instrument depends on how it is used rather than on
> what the manufacturer says about it.

Presumably, including the "Bird wattmeter" and "SWR meter". :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2928. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 16:23:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c90af$1_4@corp.newsgroups.com>
Source record: 89849

Tam/WB2TT wrote:
> Going back to the Slick discussions of last winter, Was that you who made
> the statement that you can have 100% re reflection from a transmitter, even
> if it has a 50 Ohm output impedance? At first I thought this was all wet,
> but after making some low power experiments, I am convinced it is true.

It is true by definition. All reflected power incident upon a
transmitter is re-reflected, by definition. Never mind that
reflected voltage can cause an over-voltage condition and/or
reflected current can cause an over-current condition *inside*
the transmitter. By definition, any reflected power dissipated
in the source after making a round trip to the load was never
generated to begin with.
--
73, Cecil http://www.qsl.net/w5dxp

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2929. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 16:28:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c91db$1_4@corp.newsgroups.com>
Source record: 89850

Ian Jackson wrote:
> Call it an RLR meter, which is what it IS really measuring.

How about an "SVI", Superposed Voltage-sample(+/-)Current-sample,
named for the math function that it is performing?
--
73, Cecil http://www.qsl.net/w5dxp

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2930. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 16:33:13 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413c92ea$1_4@corp.newsgroups.com>
Source record: 89851

Reg Edwards wrote:
> To obtain a conjugate match it is first necessary to know what the source
> impedamce is. How or from where is that elusive figure obtained?

If no reflections are allowed to reach the source, the source
impedance doesn't matter (except maybe for efficiency).

> It is not given in a transmitting tube manufacturer's data sheets. Perhaps
> it doesn't matter what it is - not needed?

Install a matching network that achieves a quasi-conjugate
match between the network and the load. That's what I do. :-)
--
73, Cecil http://www.qsl.net/w5dxp

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2931. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 17:09:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gf4pj0prh51h25i0adeao7o2bicura8b08@4ax.com>
Source record: 89852

On Mon, 6 Sep 2004 06:20:23 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>I won't try to soften this

Hi OM,

I kin take it ;-)

: your conclusion above doesn't just _appear_ to
>be wrong, it IS wrong. 100% wrong.

Hmmm, in light of what is about to be said by you this continues to be
amusing.

>How do I know? I was the author of all of the brochures and technical data
>sheets for Harris' entire FM product line for the ten years before I
>retired.

Yes, your patter sounds like a publicist rather than a design engineer
- I've snipped your commercial fluff as it is pretty soft still.

> It
>is designed for a 50 ohm load.

Imagine THAT! Of course I won't hold my breath for your explanations
WHY (or -gasp- how) it is designed for 50/75/100/300 Ohms and not just
slap the output into any load - that would be an engineering issue of
matching which seems to be foreign to your discussion. Glad to see my
inclusions of so much of your copy brought back you memory that
rejected this:
On Sun, 5 Sep 2004 11:25:02 -0500, "Richard Fry" <rfry@adams.net>
wrote:
>The source impedance of most transmitters is not published even today.
I can accept that perhaps under your hand it was not, but Harris has
returned to the fold of conventional design specifications:
MW-10B SPECIFICATIONS
RF OUTPUT IMPEDANCE: 50 ohms, unbalanced.
Other output impedances available on special order.

Harris Platinum Z FM transmitter
100 ohm output impedance (unbalanced)

HARRIS SW-50 A
RF Output Impedance 300 ohms balanced, 2.0 to 1 maximum VSWR
Don't bother rummaging up you own drafts lingering in the musty
corners of the web, there are newer spec sheets available that easily
eclipse you in numbers to the contrary, but typical engineering

regards for specifying the output impedance.

I would suggest you review the works of a real engineer, Geoff Mendenhall (you know, the guy you dissed) who explicitly offers formula and specifications that correlate to current Harris equipment design considerations for matching source Z to load Z. This has been fairly common material available from Terman (One of Geoff's references) for 70 years now and even the digital age has not changed this:

It sounds pretty simple, in fact,
each module has a torroid (coil) which is the load for that module; all those torroids are lined up and an iron pipe is run through these torroids so that the combined output of all the modules is coupled into this pipe. One end of the pipe is at ground, the other end is the RF output of the transmitter. There is an output network to match impedance of the pipe, which is probably only a few Ohms, to the required output impedance which is usually 50 Ohms, although sometimes high power transmitters are set up to provide 75 Ohms, once in a while even 300 Ohms, to drive an open wire type transmission line system.

From the Goatman:
"It was necessary to determine the plate
load impedance (formula) = 1000 Ohms
where Emin min drop across the tube in saturation
I1 ac plate current.

"Since this Zp was to be coupled into a
Z output of 50 Ohm, a impedance transformation
of 20:1 was needed."

Perhaps this is too many words for the publicity department style sheet, but to engineers there isn't an iota of difference in the design considerations of the final over the course of 1968-2004. It goes much further back than this - we will skip that so as to not appear to be roughing the receiver.

However, to this subject I am quite used to the rebuttal "You are not going to change my mind." Impeccable logic such as this and variations offered by you have scant foothold in the sweep of time. I especially enjoy the sharp swerves to avoid the Goatman's simple expression above. Reminds me of the Chinese contortionist acts that used to be the staple of the Ed Sullivan show.

73's
Richard Clark, KB7QHC

2932. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 17:11:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ad6pj0pum2o1m5tnd5k0veea7krmamm531@4ax.com>
Source record: 89853

On Mon, 06 Sep 2004 11:11:56 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Reg Edwards wrote:
>> And the accuracy of any instrument depends on how it is used rather than on
>> what the manufacturer says about it.
>
>Presumably, including the "Bird wattmeter" and "SWR meter". :-)
Not if you are measuring mud (data missing)

2933. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 17:35:34 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <h1aUAPZm$JPBFAB0@ifwtech.co.uk>
Source record: 89854

Cecil Moore wrote:
>Ian White, G3SEK wrote:
>
>> Dale Parfitt wrote:
>>> The ARRL Antenna Handbook describes ground wave as:"...any wave that
>>>stays close to the earth, reaching the receiving point without
>>>leaving the earth's lower atmosphere."
>>>
>> That definition is very misleading at VHF, since normal tropospheric
>>refraction takes place entirely in "the earth's lower atmosphere" but
>>generally doesn't involve ground at all. It's a gradual bending of the
>>space wave.
>
>Yep, the IEEE Dictionary says the "ground wave" possesses a
>space wave component. "From a source in the vicinity of the
>surface of the Earth, a wave that would exist in the vicinity
>of the surface in the absence of an ionosphere. The ground wave
>can be decomposed into the Norton surface wave and a space wave
>consisting of the vector sum of a direct wave and a ground-
>reflected wave."

Thank you - that's a new one to me.

So what does the IEEE define a "Norton surface wave" to be?

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2934. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 18:03:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413ca805_3@corp.newsgroups.com>
Source record: 89856

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>Presumably, including the "Bird wattmeter" and "SWR meter". :-)
>
> Not if you are measuring mud (data missing)

And I have indeed measured mud.

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2935. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 18:09:19 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <jJ1%c.8251$Wv5.4667@newsread3.news.atl.earthlink.net>
Source record: 89855

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10jo271ktuh542a@corp.supernews.com...
> I sense there's still a failure to communicate.
>
> If Dale means by "V/U" VHF and UHF, ground wave isn't a viable means of
> propagation anyway. The attenuation of ground waves increases with
> frequency, to the point that they're virtually useless at VHF and above.
> So at those frequencies, I'd think the polarization choice for short
> range communication would be based on how it affects attenuation,
> multipath, and QRM. Given those criteria, horizontal might well have an
> advantage for short range communication, in some locations at least. And
> it's long been favored for long range VHF/UHF communication.
>

Ground wave is a broad term, but it is how VHF and UHF usually propagate.
Ground wave is a general term for several means of propagation. Surface
wave is what you are really talking about when you mention Ground wave.
Space wave, atmosphere ducts and other means near the earth are all part of
the Ground wave term. The Sky wave is usually the broad term for
reflections off the ionosphere and other reflected modes from high above the
surface.

For vertical or horizontal there is very little differance in which is used
at VHF and above. Noise is usually vertical polorised so horizontal for the
RF is usually used . Vertical is used so the simple vertical moble whips
could be used for all around coverage.

2936. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 18:22:34 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413cac8c_3@corp.newsgroups.com>
Source record: 89857

Ian White, G3SEK wrote:
> So what does the IEEE define a "Norton surface wave" to be?

"Norton surface wave - a guided EM wave produced by a source over or on the ground. It is the non-geometrical optics component of the ground wave."

"geometric optics - the treatment of propagation of light as rays. Note: Rays are bent at the interface between two dissimilar media or may be curved in a medium in which refractive index is a function of position."

Presumably, there are no geometric optics involved in RF emissions from an antenna. Therefore, for an RF antenna, the Norton wave equals the surface wave. The surface wave and ground wave are NOT the same thing. Besides the surface wave, the ground wave contains part of the space wave which itself consists of two parts, direct and ground-reflected.

So according to the IEEE, it is not ground wave Vs sky wave. It is surface wave Vs sky wave. Ground wave = part surface wave and part sky wave.
--
73, Cecil http://www.qsl.net/w5dxp

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2937. Hy-gain ant query

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 18:31:34 UTC
From: Denis O' Flynn <ei6hb@eircom.net>
Message-ID: <422%c.26724$Z14.8702@news.indigo.ie>
Source record: 89858

I picked up a vertical antenna today from a fellow ham who had it stored outside !! not in use.
I have the 3 part numbers of the coils - 10M (870138). 15M (870135) and 20M coil (870369). There is also a 40M coil on top of the flat washer with no part number on it. The flat washer has holes which appear to have been a groundplane or a cap. hat.

any idea what I may have?? I have tried the net with these numbers to no avail.

de Denis EI6HB
ei6hb at eircom.net

2938. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 18:41:37 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <k8bpj098cs1bd7ehhgk5krmc376bmqb0m5@4ax.com>
Source record: 89859

On Mon, 6 Sep 2004 10:01:15 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>"Walter Maxwell" wrote
> > If you question my statements above see the data from my measurements
>using
>> professional grade instruments in either QEX, May/Jun 2001, Chapter 19 in
>> Reflections II,
>>
>============================
>
>The accuracy of measurements depends on who uses the instruments rather than
>on what the manufacturer says in his sales catalogue. I'd much prefer just
>to take your word for it, Walt. The manufacturer's type number is
>superfluous - it sounds like a gratuitous advert.
>----
>Reg, G4FGQ
>
Thanks for the compliment, Reg, that you prefer to take my word for it. However, the reason we include the manufacturer is not as a gratuitutous advert, but to distinguish between the Cadillacs (Hewlett-Packard and General Radio, among a few others) and the non-descripts. The Cadillacs are professional, precision instruments, which, when used by knowledgeable people, provide data that can be relied upon.

Without knowledge of the quality of the measuring device the reader is justifiably suspicious of the data.

Walt

2939. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 19:04:06 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <bubpj0plv2jrd1n0ge2h8ocneb8h7tlvkr@4ax.com>
Source record: 89860

On Mon, 6 Sep 2004 14:44:03 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>"Richard Harrison" wrote >
>> I`d design for a conjugate match at the rated load and include overload
>> protection for an output short circuit or near short. For solid-state
>> I`d provide overvoltage protection.in addition to overcurrent
>> protection.
>>
>==================================
>
>To obtain a conjugate match it is first necessary to know what the source
>impedamce is. How or from where is that elusive figure obtained?
>
>It is not given in a transmitting tube manufacturer's data sheets. Perhaps
>it doesn't matter what it is - not needed?
>----
>Reg, G4FGQ
>
I guess I'll have to repeat it for emphasis, Reg, but if the drive level is set
so that when the tuning and loading of the pi-network is adjusted to deliver the
maximum available power is within the normal operating range, there is a
conjugate match. In this condition the source and load impedances are equal.
This condition is by definition and proved by measurements.

If you like I'll send you a copy of the test procedure and the data.

Walt

2940. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 19:17:32 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <k7dpj0p8tq5va8eponh9osr23he444ie68@4ax.com>
Source record: 89861

On Mon, 6 Sep 2004 06:51:01 -0500, "Richard Fry" <rfry@adams.net> wrote:

>"Walter Maxwell"
>> When I bought the tx for new BC stn WCEN in 1948
>> it was from Gates Radio in Quincy. Is it possible that
>> Geoff's business is a spinoff from Gates?
>
>Yes, Harris-Intertype (later just "Harris Corp") bought Gates Radio, lock,
>stock and barrel -- not a spinoff.
>
>> Don Peterson, developing the use of TDR for finding discontinuities
>> in RF feed lines for TV. He developed a kit for use in the field for
>> locating ghost problems in the lines connecting the tx to the antenna.
>> Were you aware of Don's work in this area?
>
>Vaguely. My primary contact and mentor was Dr Matti Siukola, lead engineer
>at RCA's antenna lab and test range at Gibbsboro, NJ. Under his direction I
>was responsible for updating and improving the VHF and UHF RF pulse test
>sets used by RCA Field Service.
>
>RF

At the RCA Labs antenna lab Dr. Siulola's name was held in reverence, but I never had the opportunity to meet him. After initially being at the RCA Labs antenna lab I originated the antenna lab at the new RCA Labs spinoff division, the Astro-Electronics Div, which produced the world's first weather satellite, TIROS 1, of which I developed the entire antenna system. However, I began that development at the RCA Labs antenna lab prior to the AED spinoff. I was working there along with Jess Epstein, of the Brown, Lewis, and Epstein group who performed the ground radial experiment that set the FCC standards for radials that still exist today.

I also spent time at the Moorestown antenna lab, working on the development of the Lunar Rover dish antennas. On its finish I performed all the final pattern, gain, and ellipticity measurements prior to shipping them to NASA.

Walt

2941. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 19:48:18 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <57epj01ob989sl78g38k9d5d7j3d4803vm@4ax.com>
Source record: 89862

On Mon, 6 Sep 2004 10:39:54 -0400, "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:

>Hi Roy,
>
>Going back to the Slick discussions of last winter, Was that you who made
>the statement that you can have 100% re reflection from a transmitter, even
>if it has a 50 Ohm output impedance? At first I thought this was all wet,
>but after making some low power experiments, I am convinced it is true.
>
>Tam/WB2TT
>

Yep , Tam, it's correct. The internal resistance in Class B and C amps has two parts, 1) the cathode-to-plate resistance, which is dissipative, and 2) the non-dissipative resistance established by the V/I ratio within the pi-network tank circuit--a high resistance at the input and a low resistance at the output. The V/I ratio also establishes the slope of the load line. Consequently, the reflected power reaching the network output is not absorbed, but instead adds to the power delivered by the generator. Although powers are not generally considered to add, they do in this case, because their respective voltage and current phasors add. If the reflected voltage and current phasors are not in phase with those from he source, the only result is that the source is mismatched to the load and reduces its delivery of power. Readjusting the tuning and loading controls brings the out-of-phase phasors in phase, establishes a conjugate match and the source again delivers the maximum available power.

Walt, W2DU

2942. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 19:54:41 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <40gpj0tiv7b49q8qbd50dffjupv9lsqvrm@4ax.com>
Source record: 89863

On Mon, 6 Sep 2004 10:39:54 -0400, "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:

Tam, would you please send me your email address? I want to send you a copy of two new chapters from Reflections III. I have reason to suspect your email shown above is not correct for email.

Walt

2943. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 19:57:50 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <n9epj05ac33tvcgtg9j5b52lg1h7879sgi@4ax.com>
Source record: 89864

On Mon, 06 Sep 2004 18:41:37 GMT, Walter Maxwell <w2du@iag.net> wrote:

[snip]
|Thanks for the compliment, Reg, that you prefer to take my word for it. However,
|the reason we include the manufacturer is not as a gratuitutous advert, but to
|distinguish between the Cadillacs (Hewlett-Packard and General Radio, among a
|few others) and the non-descripts. The Cadillacs are professional, precision
|instruments, which, when used by knowledgeable people, provide data that can be
|relied upon.
|
|Without knowledge of the quality of the measuring device the reader is
|justifiably suspicious of the data.

Careful Walt. Reg is an Englishman, he doesn't know what at Cadillac
is, other than an American automobile, which makes it suspect.

You should use Jaguar for comparison. Uh oh, better not, that is an
American company (Ford).

Alright, how about Aston Martin. Darn, another Ford.

I've got it; Rolls-Royce! Nope, that's a German car (BMW).

Okay maybe a Bentley. Nooo. That's a Volkswagon.

Surely a Land Rover. Not again! Another Ford.

You're right. HP and GR were the Cadillacs of the industry. [g]

2944. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 20:05:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7egpj05tk8nmns5qnafem10clt1d845cp3@4ax.com>
Source record: 89865

On Mon, 6 Sep 2004 06:20:23 -0500, "Richard Fry" <rfry@adams.net>
wrote:

>How do I know? I was the author of all of the brochures and technical data
>sheets for Harris' entire FM product line for the ten years before I
>retired. That any published value of impedance applied to the load
>impedance expected was/is universal across the product lines: AM/FM/TV.

Hi OM,

If you simply follow the reference trail of those trade publications
(the design guides used by the engineers who did the actual work) you
would find PLENTY of source Z discussion:

from Harris White Paper:
"High Linearity RF Amplifier Design"
referencing
"Advances in AM Modulation Techniques to Improve Digital
Transmission of HD Radio and DRM"

"The poor antenna match will create a significant ripple in the
transfer characteristic of the main power amplifier. If that
amplifier itself has a poor output match to 50 Ohms
[the succeeding discussion gets into the inability of feed
forward correction to accommodate to this condition and the
introduction of an expensive isolator and lowered efficiency]
.... Alternatively, the amplifier itself could be modified to
improve its output match."

From Harris White Paper:
"Improving Efficiency With Split-Level Combining"
referencing
"High-Linearity RF Amplifier Design" (op. cit.)
and
"RF Power Amplifiers for Wireless Communications"
ppg. 31-32, 110
Discussion of load pulling to determine the "source impedance."
pg. 99-103 , Figures 4.21 & 4.23
Discussion of the source transformation from source Z 4 Ohms to
load Z 50 Ohms. Amplifier exhibits an 78% efficiency.
and
"Feed Forward Linear Amplifiers"
"Frequency ripple is one of the principle factors that limit broad
band signal cancellation and hence feed forward performance."
....
"As previously discussed, to prevent loss of power due to

impedance mismatches the input and output impedance of a device
should be equal to the characteristic impedance (e.g. 50 Ohms)
of the source and load to which it is connected."

From Harris White Paper:
"REDUCING FM IBOC TRANSMISSION COSTS WITH THE PROPER
CONFIGURATION AND LINEARIZATION TECHNIQUES"
referencing
"Feed Forward Linear Amplifiers" (op. cit.)
and
"RF Power Amplifiers for Wireless Communications" (op. cit.)
and
So on and so on and so on (no deviance from commonplace
design considerations that have been described for generations).

73's
Richard Clark, KB7QHC

2945. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 20:24:44 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chih2cgts1@hercules.btinternet.com>
Source record: 89866

> Install a matching network that achieves a quasi-conjugate
> match between the network and the load. That's what I do. :-)
> --
> 73, Cecil
======================

My dear Cecil,

99% of the contributors to this newsgroup, particularly the professionals, should make appointments to see a shrink. Problem? - the inabilty to grasp what is staring them in the face.

It's a sad reflection on the present state of electrical engineering educational facilities in the Western world. Never mind, there's still hope, the Chinese, Vietamese, Hindu's, Indianesians, etc., will help us to sort out such trivial matters as vswr. The problem of sharing energy resources will take a little longer.

I have just opened a bottle of Chilean, Isla Negra, Cabernet Sauvignon. I can't read what else it says on the label. But we musn't neglect our good (South) American near-neighbours and friends.

I am listening to the BBC. The World's finest educational facility although it sounds more like the VOA than the VOA.

It seems that a very large proportion of the Virginian forefathers were of the criminal classes, convicts, conveyed in chains, who shared there lives on arrival with negro slaves. Life expectancy in Baltimore and Maryland was about 7 years. Between 50,000 and 100,000 convicts were exported to the Land of the Free. They were present at the Alamo and assisted at many other places to rid the land of the original inhabitants. Is this proudly recorded in your children's history books?

Shot any rattlers lately?

From a sincere European friend of all USA citizens, descendents of convicts, SWR worshippers, conjugal-match adherents, voters even for Bush, or otherwise.

Reply not needed.

Punchinello, G4FGQ

2946. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 20:44:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kpipj0tj0ho1np6r4371t2f390o5ttb8da@4ax.com>
Source record: 89867

On Mon, 6 Sep 2004 20:24:44 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>make appointments to see a shrink

Good advice.

Does yours offer refunds? I doubt if there are any measureables that
Lord Kelvinator could use to derive a cost/benefit ratio - hence your
shrink's depostis are secure.

Stick with the wine, at least you know where your money is going, and
it keeps you out of the mud. ;-)

73's
Richard Clark, KB7QHC

2947. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 20:48:12 UTC
From: "Bob (VE5AG)" <ve5agREMOVEbob@sasktel.net>
Message-ID: <10jpjbb6orhgt03@corp.supernews.com>
Source record: 89868

Hi...first post...I was taking a first run at 4nec2 last nite, and since I am interested in modeling a short vert for the 5th wheel (I just retired), I tried the "vehicle.nec" and the "grdplane?.nec". According to the notes, these models were converted to nec2 by K6STI. But, at least right out of the box, they both produced errors. By looking at the Validation log, these errors were associated with adjacent segment lengths, or length to radius in segments. My question...since I am new to Nec2 (but not to Elnec or Mininec), did I miss something in the Nec2 program setup, or do these (2) models not normally run without tweaking them? Thanks
Bob, VE5AG

2948. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 22:19:50 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <n5npj0189cdq8r684qrsrv8jcbo59be2hc@4ax.com>
Source record: 89869

On Mon, 6 Sep 2004 20:24:44 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>> Install a matching network that achieves a quasi-conjugate
>> match between the network and the load. That's what I do. :-)
>> --
>> 73, Cecil
>=======================
>
>My dear Cecil,
>
>99% of the contributors to this newsgroup, particularly the professionals,
>should make appointments to see a shrink. Problem? - the inabilty to grasp
>what is staring them in the face.
>
>It's a sad reflection on the present state of electrical engineering
>educational facilities in the Western world. Never mind, there's still
>hope, the Chinese, Vietamese, Hindu's, Indianesians, etc., will help us to
>sort out such trivial matters as vswr. The problem of sharing energy
>resources will take a little longer.
>
>I have just opened a bottle of Chilean, Isla Negra, Cabernet Sauvignon. I
>can't read what else it says on the label. But we musn't neglect our good
>(South) American near-neighbours and friends.
>
>I am listening to the BBC. The World's finest educational facility although
>it sounds more like the VOA than the VOA.
>
>It seems that a very large proportion of the Virginian forefathers were of
>the criminal classes, convicts, conveyed in chains, who shared there lives
>on arrival with negro slaves. Life expectancy in Baltimore and Maryland was
>about 7 years. Between 50,000 and 100,000 convicts were exported to the Land
>of the Free. They were present at the Alamo and assisted at many other
>places to rid the land of the original inhabitants. Is this proudly recorded
>in your children's history books?
>
>Shot any rattlers lately?
>
>From a sincere European friend of all USA citizens, descendents of convicts,
>SWR worshippers, conjugal-match adherents, voters even for Bush, or
>otherwise.
>
>Reply not needed.

>----
>Punchinello, G4FGQ
>
Hello All,

Reg's post above just gave away his cover as an undersea transmission-line engineer that renders his failure to comprehend SWR, conjugate match, oops, I mean conjugal match, completely comprehensible.

I know his relevation was totally inadvertant, but it's evident to this SWR worshipper that he's really a situp comedian empowered with an overdose of, what did he call it, Kavurnay Sawvignun? He admitted he couldn't read what was printed on the bottle.

So let's all take pity on this sensitive guy who's beyond his depth in trying to fathom our attempts to bring him up to speed on the vocabulary required for speaking intelligently on the vital engineering issues we discuss on this important media of understanding.

God bless the Cween.

Walt

2949. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 22:26:16 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <3mopj0pnlm84g2btrl4v7ccaah93li5479@4ax.com>
Source record: 89870

On Mon, 06 Sep 2004 12:57:50 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:

>On Mon, 06 Sep 2004 18:41:37 GMT, Walter Maxwell <w2du@iag.net> wrote:
>
>[snip]
>|Thanks for the compliment, Reg, that you prefer to take my word for it. However,
>|the reason we include the manufacturer is not as a gratuitutous advert, but to
>|distinguish between the Cadillacs (Hewlett-Packard and General Radio, among a
>|few others) and the non-descripts. The Cadillacs are professional, precision
>|instruments, which, when used by knowledgeable people, provide data that can be
>|relied upon.
>|
>|Without knowledge of the quality of the measuring device the reader is
>|justifiably suspicious of the data.
>
>Careful Walt. Reg is an Englishman, he doesn't know what at Cadillac
>is, other than an American automobile, which makes it suspect.
>
>You should use Jaguar for comparison. Uh oh, better not, that is an
>American company (Ford).
>
>Alright, how about Aston Martin. Darn, another Ford.
>
>I've got it; Rolls-Royce! Nope, that's a German car (BMW).
>
>Okay maybe a Bentley. Nooo. That's a Volkswagon.
>
>Surely a Land Rover. Not again! Another Ford.
>
>You're right. HP and GR were the Cadillacs of the industry. [g]

Man, Wes, I sure ran of the road and totalled the Caddie on this one, didn't I?

However, what happened to the Rolls-Royce? Did the Queen boot it out? As I recall it from my pre-teen days, it was definitely a Brit. And how did it manage to land in Deutchland? Or did Neville Chamberlin manipulate this one too?

Walt

2950. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 22:49:00 UTC
From: richardharrison@webtv.net
Message-ID: <19717-413CE95C-25@storefull-3252.bay.webtv.net>
Source record: 89771

Walter, W2DU wrote:
"The internal resistance in Class B and C amps has two parts, 1) the cathode-to-plate resistance, which is dissipative, and 2) the non-dissipative resistance established by the V/I ratio within the pi-network tank circuit -- a high resistance at the input and a low resistance at the output."

It`s true that a parallel resonant circuit constructed of ideal inductance and capacitance has high (infinite) impedance and no loss. The configuration of the high impedance in series with the load limits output. But, we use imperfect components and we seek a limiting impedance equat to the 50-ohm load, not an infinite impedance.

My take on the non-dissipative impedance is that it comes from the switched-off time of the Class B and C amps. During this time in each cycle, no current flows through the amp to cause loss. Likewise, there is no current from the amp (actually it is a switch operating on and off at a radio frequency) to the load or tank circuit. The tank circuit cleans up the pulse mess, filling gaps in the RF cycle.

Best regards, Richard Harrison, KB5WZI

2951. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-06 23:49:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chit2moum1@sparta.btinternet.com>
Source record: 89772

Thanks Stew for your valient attempt to clarify the meaning of Quality in the electrical measuring instrument field in terms of the motor industry. Unfortunately the motor industry, as is everything else, is now in the hands of the International Corporations and is all mixed up.

We are left only with the remains of the confusion with the quality description "Rolls Royce" which all nationalities understand. It remains for the same reason that the English language remains. Rolls Royce appeared at the end of the British era of engineering supremacy which began with the Bimingham Wire Gauge around the time of the French revolution and continued through the beautiful Boulton and Watt reciprocating, condensing steam engines which ruled the Earth for 80 years, as did Britannia's well-engineered battleships and 16-inch, 18-inch guns.

Our German friends took over at the battle of Jutland and the Bismark incident. But the optical qualities of Zeiss rangefinders probably had something to do with it.

But to avoid an international incident, it should be stated the ordinary engineering educated Englishman quite understands the meaning of "Cadillac" although he may not have the foggiest idea of where the name came from. Was it named after a red-indian tribe such as Cincinatti or Detroit?

By the way, I sometimes think that mention or reference to a particular measuring instrument or the name of a prominent author implies a lack of self-confidence and conviction in what one is stating.

As for me, I rarely make such mentions if only to avoid the danger of mis-quoting. The responsibity is then entirely mine.

Although I may jokingly profess ignorance of American electrical measuring instruments, for several years I was the Government-approved Head of Laboratory of a measurement standards laboratory of second echelon to the British National Physical Laboratory. I was familiar with the excellent qualities of HP, GR, Fluke and similar instruments. I played an original part in the conversion of the assessment of National worst-case measurement uncertainties to statistical uncertainty asssment. But I don't brag about it.

Reg, G4FGQ

==========

> Thanks for the compliment, Reg, that you prefer to take my word for it. However,
> |the reason we include the manufacturer is not as a gratuitutous advert, but to

> |distinguish between the Cadillacs (Hewlett-Packard and General Radio,
among a
> |few others) and the non-descripts. The Cadillacs are professional,
precision
> |instruments, which, when used by knowledgeable people, provide data that
can be
> |relied upon.
> |
> |Without knowledge of the quality of the measuring device the reader is
> |justifiably suspicious of the data.
>
> Careful Walt. Reg is an Englishman, he doesn't know what at Cadillac
> is, other than an American automobile, which makes it suspect.
>
> You should use Jaguar for comparison. Uh oh, better not, that is an
> American company (Ford).
>
> Alright, how about Aston Martin. Darn, another Ford.
>
> I've got it; Rolls-Royce! Nope, that's a German car (BMW).
>
> Okay maybe a Bentley. Nooo. That's a Volkswagon.
>
> Surely a Land Rover. Not again! Another Ford.
>
> You're right. HP and GR were the Cadillacs of the industry. [g]

2952. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 00:21:09 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <chiutlmsv0$216.39.144.81@theriver.com>
Source record: 89773

On Mon, 06 Sep 2004 22:26:16 GMT, Walter Maxwell wrote:
>
> However, what happened to the Rolls-Royce? Did the Queen boot it out? As I
> recall it from my pre-teen days, it was definitely a Brit. And how did it manage
> to land in Deutchland? Or did Neville Chamberlin manipulate this one too?

Still made in Britain, but owned by BMW, who also make the recent
incarnation of Minis.

Bob, N7XY

2953. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 00:24:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hiupj01jg8hn5uoro7bpo01kct31evdn90@4ax.com>
Source record: 89774

On Mon, 6 Sep 2004 17:49:00 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>It`s true that a parallel resonant circuit constructed of ideal
>inductance and capacitance has high (infinite) impedance and no loss.

Actually, if it were isolated in museum glass case perhaps, but the loaded Q, by design, is less than 20, often less than 10, and in the case illustrated by Mendenhall's FM transmitter = 2. Loss comes to it by nature as a practical necessity of moving power (transmitting) to the ï¿½ther.

>The configuration of the high impedance in series with the load limits
>output. But, we use imperfect components and we seek a limiting
>impedance equat to the 50-ohm load, not an infinite impedance.

The impedance transform of coupling that changed from plate resistance to load resistance is quite capable of reciprocal transformation (at least in the rigs of transistor persuasion) to allow return power from load Z to match towards the source Z. This is the natural progression of linear design.

>My take on the non-dissipative impedance is that it comes from the
>switched-off time of the Class B and C amps. During this time in each
>cycle, no current flows through the amp to cause loss. Likewise, there
>is no current from the amp (actually it is a switch operating on and off
>at a radio frequency) to the load or tank circuit. The tank circuit
>cleans up the pulse mess, filling gaps in the RF cycle.

By the nature of reciprocity, loss must follow from reflected power returning through it to a known dissipater, the cathode-plate. If that cathode-plate is available only intermittently during cycles, reciprocity is fully functioning through the same available flywheel of this loaded Tank.

All should notice that if this scenario is NOT working as described, the caloric demands of reflected power would resolve in a high energy arc along the way (no one has ever experienced this?). This may displace WHERE the dissipation occurs, but it does not render reflected power an inert concept.

All such descriptions can be described in a bulk component model, it is still the same heat (only the remote arcing becomes an enigma some would sweep under the rug).

73's
Richard Clark, KB7QHC

2954. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 00:29:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jq06hs3elf616@corp.supernews.com>
Source record: 89775

For a story about one of the things that made Cadillac "The Cadillac" of automobiles, see http://www.uh.edu/engines/epi133.htm.

Caddilac, incidentally, was named after Le Sieur Antoine de la Mothe Cadillac, the Frenchman who in 1701 built a stockade, trading post, and settlement called Ville dï¿½Etroit, now known as Detroit. See http://www.cadillacforums.com/cadillac-history.html.

Roy Lewallen, W7EL

Reg Edwards wrote:

> . . .
> But to avoid an international incident, it should be stated the ordinary
> engineering educated Englishman quite understands the meaning of "Cadillac"
> although he may not have the foggiest idea of where the name came from. Was
> it named after a red-indian tribe such as Cincinatti or Detroit?
> . . .

2955. Re: Hy-Gain antenna query

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 01:09:52 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net>
Message-ID: <AT7%c.255163$8_6.219144@attbi_s04>
Source record: 89776

"Denis O' Flynn" <ei6hb@eircom.net> wrote in message
news:422%c.26724$Z14.8702@news.indigo.ie...
> I picked up a vertical antenna today from a fellow ham who had it stored
> outside !! not in use.
> I have the 3 part numbers of the coils - 10M (870138). 15M (870135) and 20M
> coil (870369). There is also a 40M coil on top of the flat washer with no
> part number on it. The flat washer has holes which appear to have been a
> groundplane or a cap. hat.
>
> any idea what I may have?? I have tried the net with these numbers to no
> avail.
>
> de Denis EI6HB
> ei6hb at eircom.net
>
Denis -

You may be describing the HyGain "AVQ" series of HF vertical antennas. You can check the HyGain web site (now owned by MFJ):
http://www.hy-gain.com/products.php?prodid=AV-14AVQ

Part numbers for the Hy-Gain AV-14AVQ antenna (these numbers are VERY close to your part numbers)
http://www.hy-gain.com/parts.php?prodid=AV-14AVQ

HyGain did make (at one time) a 18AVQ, which was a 14AVQ with the 40 meter trap -- so it would work on 75/80 meters.

Technical Support: hygain@hy-gain.com

Unfortunately, MFJ is NOT known for quick technical support (as stated on their web site!)

"NOTE: There is a two to four week response time for all technical support emails. If this is not fast enough for you, please call us on our technical support lines listed below."

By Telephone:
General Information: (800) 973-6572
(662) 323-9538
Technical Support: (662) 323-9538
Fax Number: (662) 323-6551

gb

2956. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 01:16:35 UTC
From: richardharrison@webtv.net
Message-ID: <26628-413D0BF3-35@storefull-3253.bay.webtv.net>
Source record: 89777

Wes wrote:
"I`ve got it: Rolls-Royce! Nope, that`s a German car (BMW)."

Who makes the Rolls-Royce jet engines now?

Our company`s first jet airtcraft was a Vickers Viscount prop-jet. We were in a long cue waiting for one when a wire from Vickers came saying Cubana Airlines had defaulted on an executive outfitted Viscount for Fidel Castro. Did anyone in the cue want the aircraft? Our chief pilot asked the dhairman if he could buy it? The answer was yes. It was already outfitted almost as we would have done anyway except our labeling would have been in English instead of Spanish.

I remember landing in Antafagasto Chile right after we got the Viscount. The Shell Oil tank truck charged out and the operator asked our pilot, Charlie Walling, which grade of kerosene he wanted, JP-1,2,3,or 4, etc. Charlie replied he would have to consult the owners manual, a really big tome. The book said any grade is fine for the Rolls-Royce turbines. Charlie told the Shell guy to fill it with whatever grade he was long on. Sure enough, the engines lit right off and ran fine. Most remarkable was after a flight from Houston, all the engines only required about a teacup of oil. Our piston engined aircraft would have consumed gallons of oil on the same flight.

Besty regards, Richard Harrison, KB5WZI

2957. For women:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 01:41:58 UTC
From: Popcorn Lover <popcorn@N0T-SPAM.COM>
Message-ID: <Xns955CC87BF98F3popcornN0TSPAMCOM@206.124.0.13>
Source record: 89778
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
http://groups.yahoo.com/group/AmateurRadioWomen

--
- Popcorn Lover
If you love popcorn too, there are no popcorn groups on usenet but
there IS one in Yahoo Groups:
http://groups.yahoo.com/group/Popcorn_Lovers
The internet's first-ever-in-the-world popcorn group!
Share the word on making great popcorn - come join us!
```

2958. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 01:49:51 UTC
From: Bob Nielsen <nielsen@removethis.oz.net>
Message-ID: <chj43v$4vp$0$216.39.144.81@theriver.com>
Source record: 89779

On Mon, 06 Sep 2004 17:29:04 -0700, Roy Lewallen wrote:
> For a story about one of the things that made Cadillac "The Cadillac" of
> automobiles, see http://www.uh.edu/engines/epi133.htm.
>
> Caddilac, incidentally, was named after Le Sieur Antoine de la Mothe
> Cadillac, the Frenchman who in 1701 built a stockade, trading post, and
> settlement called Ville dï¿½Etroit, now known as Detroit. See
> http://www.cadillacforums.com/cadillac-history.html.
>
> Roy Lewallen, W7EL
>
> Reg Edwards wrote:
>
>> . . .
>> But to avoid an international incident, it should be stated the ordinary
>> engineering educated Englishman quite understands the meaning of "Cadillac"
>> although he may not have the foggiest idea of where the name came from. Was
>> it named after a red-indian tribe such as Cincinatti or Detroit?
>> . . .

And Cincinnati was named after the Society of the Cincinnati, which in
turn was named after the Roman General Lucius Quintius Cincinnatus.

Bob, N7XY

2959. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 02:20:20 UTC
From: richardharrison@webtv.net
Message-ID: <10408-413D1AE4-115@storefull-3251.bay.webtv.net>
Source record: 89780

Wes wrote:
"I`ve got it: Rolls-Royce! Nope, that`s a German car (BMW)."

Germans respect British motors. The Messerschmitt Bf 109 resulted from a competition spurred by a request for proposal to build a new German fighter aircraft. The Messerschmitt was one of 3 designs from competing manufacturers who built prototypes for the competition. All 3 featured British Merlin engines! The production Bf 109 had a 1475 hp Daimler-Benz engine, but a Merlin powered it to victory in competition.

Hermann Goering declared in Berlin, "If the enemy bombs this place my name is Mud." Later, as he arrived in a bomb shelter, he said,"Let me introduce myself. My name is Mud."

A famous German fighter leaded once asked his commander for a squadron of Spitfires!

Best regards, Richard Harrison, KB5WZI

2960. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 03:24:05 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-E8B352.20240506092004@morgoth.sfu.ca>
Source record: 89781

In article <chit2moum1@sparta.btinternet.com>,
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote:

> But to avoid an international incident, it should be stated the ordinary
> engineering educated Englishman quite understands the meaning of "Cadillac"
> although he may not have the foggiest idea of where the name came from. Was
> it named after a red-indian tribe such as Cincinatti or Detroit?

Debunking mode ON

Cincinnati, Ohio (not Cincinatti) was named not after what we in Canada call a First Nation but instead after the Society of the Cincinnati, an organization formed after the American War of Revolution (1776 and all that). The organization was composed of former American Army officers. The Society of Cincinnati, in turn, took its name from Lucius (Titus) Quinctius Cincinnatus, a farmer and former consul who was asked to leave his fields to become dictator to defend Rome against outsiders, in 458 BC. Under his command Rome's enemies were defeated, and 16 days later he returned to his farm.

Cadillac, Michigan was named after Antoine Laumet de La Mothe Cadillac, a Frenchman established a settlement near what is now Detroit, Michigan, in 1701, and the automobile was named after either the city or the French settler.

Debunking mode OFF

David
(1) born in Cincinnati, Ohio in 1935
(2) licenced as W8EZE in that city in 1949
(3) learned about Cincinnatus in grade school
(4) wishes that certain US politicians would just return to their ranches where they could only harm rattlesnakes and cactus plants

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

2961. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 03:45:43 UTC
From: richardharrison@webtv.net
Message-ID: <19717-413D2EE7-36@storefull-3252.bay.webtv.net>
Source record: 89782

Roy Lewallen wrote:
"Cadillac, incidentally, was named after Le Sieur Antoine de la Mothe Cadillac, the Frenchman who in 1701 built a stockade, trading post and settlement called Ville d`Etroit now called Detroit."

Something the "Engines of Our Ingenuity" story doesn`t tell us is that Cadillac was Henry Ford`s company which he sold to what was to become General Motors

Best regards, Richard Harrison, KB5WZI

2962. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 04:15:24 UTC
From: richardharrison@webtv.net
Message-ID: <19716-413D35DC-130@storefull-3252.bay.webtv.net>
Source record: 89783

Richard Clark wrote:
"This may displace WHERE the dissipation occurs, but it does not render reflected power an inert concept."

No it doesn`t, but it doesn`t require its acceptance back in the transmitter either.

I`ll repost my earlier posting as near as I can reconstruct it. It seems to be lost in cyberspace.

Walter Maxwell, W2DU wrote:
"Consequently, the reflected power reaching the network output is not absorbed, but instead adds to the power delivered by the generator."

My explanation for the above, which is my observation too, is that an energy wave experiences a phase reversal between the volts and amps which it will generate after reflection. That fact makes Bird`s directional coupler in its wattmeter work.

The transmitter`s output isn`t receptive and won`t absorb a wave that produces out-of-phase volts and amps, so the reflected wave is re-reflected from the transmitter, placing its amps and volts back in-phase.

The newly minted RF and the twice reflected RF are similar, both having their volts and amps in-phase. So, the similar RF constituents merge to have a go at the reflection point.

Best regards, Richard Harrison, KB5WZI

2963. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 06:13:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <97kqj0doeevpiviga19eql2ejn74kksjq1@4ax.com>
Source record: 89784

On Mon, 6 Sep 2004 23:15:24 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>The newly minted RF and the twice reflected RF are similar, both having >their volts and amps in-phase.

Hi Richard,

In a reality of 359 other possible phase angles, how does a transmitter happen to always be "in-phase" to any reflection?

73's
Richard Clark, KB7QHC

2964. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 07:45:56 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <9NeTOyG0cWPBFAR6@ifwtech.co.uk>
Source record: 89785

Bob Nielsen wrote:
>On Mon, 06 Sep 2004 22:26:16 GMT, Walter Maxwell wrote:
>>
>> However, what happened to the Rolls-Royce? Did the Queen boot it out? As I
>> recall it from my pre-teen days, it was definitely a Brit. And how
>>did it manage
>> to land in Deutchland? Or did Neville Chamberlin manipulate this one too?
>
>
>Still made in Britain, but owned by BMW, who also make the recent
>incarnation of Minis.

The original MGs were built right here in Abingdon-on-Thames, and the big factory where the Minis are made is just up the road in Oxford. Lots of local people either are or have worked in the car industry... and some of them are also hams.

Even when R-R Motors was an independent company, it used part of the big Oxford factory. That much larger company eventually bought R-R, but in turn has done deals in which first Honda and then BMW provided transfusions of new technology in return for a large share of the company itself. However, the company still makes its own cars under the name Austin Rover.

R-R Motors has always been a separate operation, with very different ways of doing things. For example, all the stories you've heard about countless coats of paint, each one hand-applied and hand-rubbed, are true. The comforting thing is that down at the other end of the factory, cars for the rest of us are being stamped out with modern high-tech, high-bake paint jobs that will wear far better.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2965. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 07:56:29 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <keIlq$ItmWPBFATW@ifwtech.co.uk>
Source record: 89786

Richard Harrison wrote:
>
>Who makes the Rolls-Royce jet engines now?
>
Rolls-Royce do. The aero engine operation separated from the original
car building operation in the 1970s.

When the two companies split, they were smart enough to let both keep
the hugely valuable brand name - unlike Hewlett-Packard.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2966. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 08:51:30 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <fEe%c.18748$9Y5.12435@fed1read02>
Source record: 89787

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:keIlq$ItmWPBFATW@ifwtech.co.uk...
> Richard Harrison wrote:
>>
>>Who makes the Rolls-Royce jet engines now?
>>
> Rolls-Royce do. The aero engine operation separated from the original car
> building operation in the 1970s.
>
> When the two companies split, they were smart enough to let both keep the
> hugely valuable brand name - unlike Hewlett-Packard.
>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

Ummm, what part of hijack & pillage are you uncomfortable about?

Ed
wb6wsn

2967. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 08:52:34 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0409070052.3c21306a@posting.google.com>
Source record: 89788

"Bob (VE5AG)" <ve5agREMOVEbob@sasktel.net> wrote in message
news:<10jpjbb6orhgt03@corp.supernews.com>...
> I tried the "vehicle.nec" and the "grdplane?.nec". According
> to the notes, these models were converted to nec2 by K6STI.

No, that's not quite true. The original models were created by K6STI.
These models then were converted by myself to (4)nec2 models already
some years ago, using the 4nec2 program.

> least right out of the box, they both produced errors. By looking at
> the Validation log, these errors were associated with adjacent segment
> lengths, or length to radius in segments. My question...since I am new
> to Nec2 (but not to Elnec or Mininec), did I miss something in the Nec2
> program setup, or do these (2) models not normally run without tweaking
> them?

No, you did not miss something. When converting Antenna-Optimizer
files to (4)nec2 input files, 4nec2 used a maximum of 10 segments per
half-wave. For the vehicle file, this produced big changes in segment
lengths for the elements at the backside of the car, which in turn
could produce Nec-2 inaccuracies. To avoid this problem, you could
manually tweak the segment count(s) or length(s).

I made a slight change in the new 3.4 version, so in the near future
one is also able to specify the nr of segments per haf wave when
converting AO files.

Another workaround for this drawback is to convert the *.ant file,
then open the corresponding *.nec file using the geometry editor,
select the whole structure and move it a short distance to the left or
right. This way the segment counts for all elements will be
recalculated according the segment density as specified in the
'segmentation' option.

Concerning the GndPlane file the vertical element was originally
specified as 1 inch in diameter, the sloping elements are specified as
#12. The change in radius for these connected elements can produce
error's when used with Nec2.

**

Furthermore, thanks for the message, because this also anbled me to
detect and solve a bug, related to the use of temporary files on
windows-XP.

Greetings from the Netherlands,
Arie.

2968. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 09:15:53 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <9ZRT7FQJxXPBFAgp@ifwtech.co.uk>
Source record: 89789

Ed Price wrote:

>>>Who makes the Rolls-Royce jet engines now?
>>>
>> Rolls-Royce do. The aero engine operation separated from the original
>>car building operation in the 1970s.
>>
>> When the two companies split, they were smart enough to let both keep
>>the hugely valuable brand name - unlike Hewlett-Packard.
>>
>
>Ummm, what part of hijack & pillage are you uncomfortable about?
>

No problem with the old "High-Priced" brand name at all - it's the other
one...

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2969. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 11:58:18 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413da3df$1_1@corp.newsgroups.com>
Source record: 89790

Richard Harrison wrote:
> The newly minted RF and the twice reflected RF are similar, both having
> their volts and amps in-phase. So, the similar RF constituents merge to
> have a go at the reflection point.

Wonder why we have protection circuitry in transmitters?
The superposed forward voltage and reflected voltage can damage an unprotected transmitter. The superposed forward current and reflected current can cause over heating in an unprotected transmitter.

The transmitter sees whatever impedance it sees and that impedance can be highly reactive. The superposed voltage can be high or low. The superposed current can be high or low. The phase between the superposed voltage and superposed current can have lots of values.

Just a for instance - assume the transmitter is putting out 70.7v in phase with 1.4a at zero deg. The arriving reflected wave is 50v at 90 deg and 1.0a at -90 deg. The load seen by the transmitter is 86.6v at 35 deg and 1.72a at -35 deg. Over voltage and over current exist at the transmitter output. The forward power is 100w and the reflected power is 50w. The net power being delivered to the reactive "load" seen by the transmitter is 86.6*1.72*cos(70.4) = 50w.

The math model is trying to dictate reality. It is supposed to be exactly the opposite. There is no magic barrier that automatically rejects reflected energy from a transmitter. Reflected energy arriving at the transmitter can drastically alter the impedance away from the designed-for load impedance. The transmitter sees one of the transformed impedances that exists on the SWR circle.

Note that the problem disappears in a matched system where reflected energy is not allowed to reach the transmitter.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2970. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 14:40:36 UTC
From: richardharrison@webtv.net
Message-ID: <20734-413DC864-313@storefull-3257.bay.webtv.net>
Source record: 89791

Richard Clark wrote:
"In a reality of 359 other possible phase angles, how does a transmitter happen to always be in-phase to any reflection?"

Connect any generator to any resistor, and current in the resistor is in-phase with the applied voltage. The Zo of the common transmission line is a reasonably good resistance. At radio frequencies, Zo is independent of frequency.

The current in the incident wave is always in-phase with the voltage applied to a transmission line. The current in the reflected wave is always 180-degrees out-of-phase with the reflected voltage. It makes no difference which was inverted by reflection, the volts or tha amps, one, and only one, of them was flipped upside down. The transmission line can and does handle the reflected wave.

Standing waves display interference between incident and reflected waves whiich ideally have in-phase and out-of-phase constituents.

The fact that the Bird wattmeter works is evidence that the theory is correct at least until a better theory replaces existing theory.

Best regards, Richard Harrison, KB5WZI

2971. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 15:05:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <h7jrj0hbkadvcbrdragher5hg9vcdf3suc@4ax.com>
Source record: 89792

On Tue, 7 Sep 2004 09:40:36 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>"In a reality of 359 other possible phase angles, how does a transmitter
>happen to always be in-phase to any reflection?"
>
>Connect any generator to any resistor, and current in the resistor is
>in-phase with the applied voltage.

Hi Richard,

In a world of mismatches, how does it happen that the transmitter always sees an in-phase, resistive load? If this were the best of all worlds, tuner manufacturers would be out of business, salesmen would starve and Reggie would have nothing to write about.

73's
Richard Clark, KB7QHC

2972. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 15:19:25 UTC
From: richardharrison@webtv.net
Message-ID: <26626-413DD17D-383@storefull-3253.bay.webtv.net>
Source record: 89793

Cecil, W5DXP wrote:
"The superposed forward voltage and reflected voltage can damage an unprotected transmitter."

To do so, they would be in-phase and not out-of-phase. Entirely possible if the transmission line is the right length.

If the reflected volts are in the same phase as the newly munted volts, which are larger? With a reflection coefficient of 1, and a lossless line, the open-circuit value of transmitter volts would face some lower value of line volts on opposite ends of the internal impedance of the transmitter. Which way does the current flow?

Theory is that it flows from the higher to the lower. That is, from the transmitter to the line.

Best regards, Richard Harrison, KB5WZI

2973. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 15:48:16 UTC
From: richardharrison@webtv.net
Message-ID: <26626-413DD840-384@storefull-3253.bay.webtv.net>
Source record: 89794

Richard Clark wrote:
In a world of mismatches, how does it happen that the transmitter always sees an in-phase, resistive load?"

It doesn`t. You can put a capacitor directly across its output terminals, and the transmitter will energize the capacitor. But, a transmission line is not a capacitor unless it is a short open circuit, or the equivalent. A transmission line is a distributed network of inductance and capacitance. This network transfers emergy in bucket brigade fashion. The "brigade" presents a resistive impedance to both the incident wave and to the reflected wave. Zo is an enforcer.

Best regards, Richard Harrison, KB5WZI

2974. WANTED: Hi-Q-Antennas Website

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 16:40:05 UTC
From: roland@no-spam.com
Message-ID: <413de30a.50591586@az.news.verio.net>
Source record: 89795

What happened to the subject website ....?
Roland - WB6LNA
roland@geter.org

2975. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 16:55:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8d5pj053qh44r4u0h1bkkmektaou297836@4ax.com>
Source record: 89796

On Tue, 7 Sep 2004 10:48:16 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Richard Clark wrote:
>In a world of mismatches, how does it happen that the transmitter always
>sees an in-phase, resistive load?"
>
>It doesn`t. You can put a capacitor directly across its output
>terminals, and the transmitter will energize the capacitor.

Hi Richard,

And so it would seem that a too-short antenna would act likewise.
This, then, returns us to my original question for this, a very simple example that has a currency that is frequent enough in our experience:
how does a transmitter happen to always be "in-phase" to any reflection?

73's
Richard Clark, KB7QHC

2976. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 17:30:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413df1b5$1_6@corp.newsgroups.com>
Source record: 89797

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "The superposed forward voltage and reflected voltage can damage an
> unprotected transmitter."
>
> To do so, they would be in-phase and not out-of-phase.

Nope, they don't have to be in-phase. The reflected voltage can arrive with any phase with respect to the forward voltage. You trimmed out the example I gave. I will repeat it so you can study it closer.

Just a for instance - assume the transmitter is putting out 70.7v in phase with 1.4a at zero deg. The arriving reflected wave is 50v at 90 deg and 1.0a at -90 deg. The load seen by the transmitter is 86.6v at 35 deg and 1.72a at -35 deg. Over voltage and over current exist at the transmitter output. The forward power is 100w and the reflected power is 50w. The net power being delivered to the reactive "load" seen by the transmitter is 86.6*1.72*cos(70.4) = 50w.

In the above example, the designed for output voltage is 70.7v and the designed-for output current is 1.4a. The superposed voltage is 86.6v, higher than the designed-for voltage. The superposed current is 1.72a, higher than the designed-for current. In this example, we have both over-voltage and over-current occurring *at the same time* even when the forward voltage and reflected voltage are 90 degrees out of phase. The superposed voltage is not smaller than the forward voltage until the phase angle between them is in the neighborhood of 120 degrees. Two superposed voltages with a 90 degree phase angle are *always* larger than either voltage component, i.e. SQRT(V1^2+V2^2) is always larger than either V1 or V2.

The superposed voltage will be higher than the forward voltage for any phase angle from zero to 90 degrees. At some phase angle higher than 90 degrees, in the neighborhood of 120 degrees, the superposed voltage starts to decrease.

If you sit down and draw these phasors on a piece of paper, you will discover that you are mistaken. It appears that you are thinking one-dimensionally instead of two-dimensional phasors.
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2977. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 17:35:41 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413df2f8_6@corp.newsgroups.com>
Source record: 89798

Richard Clark wrote:
> how does a transmitter happen to always be "in-phase" to any
> reflection?

It doesn't. The reflected voltage can obviously be 90 degrees
out of phase with the forward voltage in which case, the
interference term equals zero, and the superposed voltage is
SQRT(Vf^2+Vr^2), i.e. greater than Vf. (The argument reminds
me of Gary Coffman's one-dimensional "spitting up the fire
hose" argument.)
--
73, Cecil http://www.qsl.net/w5dxp

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2978. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 17:51:54 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413df6c0_6@corp.newsgroups.com>
Source record: 89799

Richard Harrison wrote:
> Standing waves display interference between incident and reflected waves
> whiich ideally have in-phase and out-of-phase constituents.

In the following, the interference term equals zero.

XMTR--------1/8WL 50 ohm lossless coax------291.5 ohm load

Forward power = 100w, reflected power = 50w.

Vf = 70.7v at zero degrees, If = 1.4a at zero degrees

Vr = 50v at 90 degrees, Ir = 1.0a at -90 degrees

Superposing:

Vtot = SQRT(Vf^2+Vr^2) = 86.6v over-voltage condition

Itot = SQRT(If^2+Ir^2) = 1.72a over-current condition

The phase angle between Vtot and Itot is about 70.4 degrees,
i.e. the source sees a highly reactive impedance.

Vtot is NOT in phase with Vf, Itot is NOT in phase with If,
Vtot is NOT in phase with Itot. Vf is NOT in phase with Vr.
No two voltages are in phase. No two currents are in phase.
--
73, Cecil http://www.qsl.net/w5dxp

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2979. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 18:47:57 UTC
From: richardharrison@webtv.net
Message-ID: <20734-413E025D-356@storefull-3257.bay.webtv.net>
Source record: 89800

Cecil, W5DXP wrote:
"Nope, they don`t have to be in-phase."

Cecil is right. The third side of a triangle can be longer or shorter than one of the sides.

I should have said, it is entirely possible that the superposed forward and reflected voltages can damage an unprotected transmitter, The reflected voltage can add to the forward voltage applied to the transmitter.

The phase of the reflected voltage should be out of phase with the transmitter source voltage to maximize the volts across the internal impedance of the transmitter if we want to damage an unprotected transmitter.

Best regards, Richard Harrisin, KB5WZI

2980. Re: WANTED: Hi-Q-Antennas Website

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 20:07:14 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <Sxo%c.17060$Ur2.9029@newssvr24.news.prodigy.com>
Source record: 89801

RSG wrote:
> What happened to the subject website ....?
> Roland - WB6LNA
> roland@geter.org

this works for me on 7 sep 04, 1505 cst:

http://www.hiqantennas.com/

kd5foy

2981. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 21:46:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413e2da8_5@corp.newsgroups.com>
Source record: 89802

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "Nope, they don`t have to be in-phase."
>
> Cecil is right. The third side of a triangle can be longer or shorter
> than one of the sides.
>
> I should have said, it is entirely possible that the superposed forward
> and reflected voltages can damage an unprotected transmitter, The
> reflected voltage can add to the forward voltage applied to the
> transmitter.
>
> The phase of the reflected voltage should be out of phase with the
> transmitter source voltage to maximize the volts across the internal
> impedance of the transmitter if we want to damage an unprotected
> transmitter.

Now assuming, as Richard H. logically did, that we don't want to damage an unprotected transmitter, let's introduce the concept of an active match Vs a passive match.

The match at the transmitter output is passive, not active. Consider the following system:

XMTR---1/4WL 300 ohm feedline---1800 ohm load

What does it really mean when we say that the XMTR "sees" 50 ohms?

It means that an interference pattern is established at the XMTR that re-reflects (re-directs) the reflected energy back toward the load. The transmitter has absolutely nothing to do with that reflection.

We can reconfigure the system as follows:

XMTR---1WL 50 ohm feedline--+--1/4WL 300 ohm feedline---1800 ohm load

Now we can see that the match is passive and the XMTR has nothing to do with the match.

Destructive interference on the XMTR side of '+' eliminates the reflections. The resulting equal magnitude of constructive interference on the load side of '+' re-reflects (re-directs) the reflected energy back toward the load.

Optics engineers understand interference. Seems RF engineers might not fully understand interference. Interference is the cause of the elimination of reflections in optic systems. Interference is the cause of elimination of reflections in RF systems, including at antenna tuners.

--
73, Cecil http://www.qsl.net/w5dxp

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2982. PRINGLES CAN ANTENNA FOR 2.4 GHz 802.11(Wi-Fi) ?????????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-07 22:29:33 UTC
From: radio913@aol.com
Message-ID: <1d15af91.0409071429.3ec7a077@posting.google.com>
Source record: 89803

Hi Fellas,

Your old buddy Dr. Slick is back again, pleading on his
hands and knees for more sage advice from the masters of
antenna design, YOU GUYS. (well, at least a few of you...
hehe! The rest you have to ignore...)

Ok, so my wireless D-link modem computer is downstairs from
the wireless router, and so the signal is very low using just the
antenna stub that it comes with.

So i found this:

http://turnpoint.net/wireless/has.html

And this Yagi-Uda scaled for 2.4 GHz:

http://seattlewireless.net/index.cgi/MicroTVAerial

Someone told me that the Yagi-uda wouldn't be as good
as the cantennas, as the later gathers more RF power, being
a type of reflector and such.

Since the Nalley's Big Chunk "Beef Stew" design won,
i think i will try that, with a funnel attached as on this
page:

http://www.saunalahti.fi/~elepal/antenna2.html

Any knowledgable advice greatly appreciated.

Slick

2983. Re: PRINGLES CAN ANTENNA FOR 2.4 GHz 802.11(Wi-Fi) ?????????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 00:34:10 UTC
From: No Spam <No92861spam@Hotmail.com>
Message-ID: <413e5380@post.usenet.com>
Source record: 89804

**** Post for FREE via your newsreader at post.usenet.com ****

"Dr. Slick"
> ...my wireless D-link modem computer is downstairs from
> the wireless router, and so the signal is very low using just the
> antenna stub that it comes with.

Corner reflector. Cardboard and tin foil. 15 minutes (if that).

About +15dB gain.

www.google.com/search?q=corner+reflector

If it works, then you can investigate other (more permanent) solutions if
you like.

-=-=-=

2984. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 01:10:21 UTC
From: richardharrison@webtv.net
Message-ID: <160-413E5BFD-520@storefull-3254.bay.webtv.net>
Source record: 89806

Cecil, W5DXP posed a problem in which a transmitter seeking a 50-ohm load (I suppose) is attached to 1 WL of 50-ohm cable which is attached to 1/4-wave of 300-ohm feedline which is attached to an 1800-ohm load.

Cecil wrote:
"Destructive interference on the XMTR side of "+" (where 50-ohm cable meets the 300-ohm Q-matching section) eliminates the reflections."

It seems to me, the product of 50 (the cable Zo) and 1800 (the load Z) is 90,000. The sq.rt. of 90,000 is 300 (the Q-section impedance). The numbers are right, so in my opinion, the Q-section converts the 1800-ohms to 50-ohms. This is the 50-ohms likely prescribed for the transmitter`s load. The 50-ohms presented by the Q-section to the cable should result in a match and thus there should be no reflected energy in the 50-ohm cable to cause interference. The reflections should all be in the 300-ohm Q-section.

Best regards, Richard Harrison, KB5WZI

2985. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 01:12:35 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <0kjsj09r9tthrv2ml5c6dqs87lfkdc8o8e@4ax.com>
Source record: 89805

On Sun, 05 Sep 2004 18:06:07 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

|On Sun, 5 Sep 2004 12:47:45 -0500, richardharrison@webtv.net (Richard
|Harrison) wrote:
|
|>The tank circuit is mostly a harmonic filter providing a very high
|>impedance to the fundamental frequency and shorting out the harmonics.
|
|Hi Richard,
|
|Even here, the Goatman offered in his notes that his finals tank
|(actually a series resonant Z match) offered a loaded Q of 2! (If I
|read his scribblings correctly.)

Yeah and he also calculates

(http://www.techatl.com/wrek/docs/gnm69_25.htm)

the required plate load resistance as:

Eb
Rl ~ -------
Idc

Which for class C is off by about a factor of 2, but with Eb = 2500
and Idc = .25, he does the division and comes up with Rl = 1000. Hey
what the heck, what's a factor of 10 among friends.

If the calculation is done more accurately:

Eb - Eg2
Rl = ---------
K * Idc

Where K = 2 for Class C and
Eg2 = 300 (screen voltage)

Then Rl ~> 4 Kohm

Since the minimum output capacitance (Cp) of a 4CX300 is 4.5 pF, the
parallel equivalent of Rl and Cp is Rp ~ 3920, Xp ~ -388.

Thus the minimum possible Q ~ 10, which to someone who has built a few
VHF amplifiers, sounds much more plausible.

For example here's one I designed and built not much later that the
WREK(ed) transmitter.

http://www.qsl.net/n7ws/K7CVT_Amp.html

But it gets worse. Try as I might with the component values he specifies, I cannot develop a plate load Z anywhere close to what is necessary. He has a lot more inductance that he thinks, so maybe that helps and I suspect his output lowpass filter (seen in the photos but not on the schematic) is part of the matching network.

I'm really surprised that with the construction and documentation presented he could get FCC type acceptance.

2986. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 02:14:57 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413e6cac_6@corp.newsgroups.com>
Source record: 89807

Richard Harrison wrote:
> Cecil, W5DXP posed a problem in which a transmitter seeking a 50-ohm
> load (I suppose) is attached to 1 WL of 50-ohm cable which is attached
> to 1/4-wave of 300-ohm feedline which is attached to an 1800-ohm load.
>
> Cecil wrote:
> "Destructive interference on the XMTR side of "+" (where 50-ohm cable
> meets the 300-ohm Q-matching section) eliminates the reflections."
>
> It seems to me, the product of 50 (the cable Zo) and 1800 (the load Z)
> is 90,000. The sq.rt. of 90,000 is 300 (the Q-section impedance). The
> numbers are right, so in my opinion, the Q-section converts the
> 1800-ohms to 50-ohms. This is the 50-ohms likely prescribed for the
> transmitter`s load. The 50-ohms presented by the Q-section to the cable
> should result in a match and thus there should be no reflected energy in
> the 50-ohm cable to cause interference. The reflections should all be in
> the 300-ohm Q-section.

Exactly, thanks to destructive interference. In S-parameter terms:

b1 = a1*s11 + a2*s12

where b1 is the normalized reflected voltage back toward the source
and is equal to zero because complete destructive interference between
a1*s11 and a2*s12 causes their phasor sum to equal zero.

Those two voltage components cancel to zero toward the source. That
destructive interference is necessary and sufficient for a matched
system. The result is constructive interference toward the load.
--
73, Cecil http://www.qsl.net/w5dxp

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2987. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 02:42:21 UTC
From: Dave Shrader <david.shrader@comcast.net>
Message-ID: <gku%c.129962$9d6.96101@attbi_s54>
Source record: 89808

Cecil Moore wrote:

> Walter Maxwell wrote:
>
>> Thus, no transmission line is necessary. For example, the device can be
>> connected directly to the antenna terminals, or any other device you
>> desire to
>> determine the mismatch, and power it directly from the signal source--no
>> transmission line is needed on either port for the device to indicate
>> the degree
>> of mismatch.
>
>
> Assume a 100+j100 ohm load and a 100-j100 ohm transmitter
> directly connected with no transmission line. The system
> is matched. Are there any reflections? Now install a
> transmission line. Will an SWR meter read the same thing
> in both cases?

What's the Zo of the transmission line? Is it sufficiently long to act
as a transmission line?

Cecil, methinks you posed an incomplete question :-)

2988. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 03:26:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t6usj05gokifpn8nfakqvrfgalgbblb1en@4ax.com>
Source record: 89809

On Tue, 07 Sep 2004 18:12:35 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:

>He has a lot more inductance that he thinks, so maybe that
>helps and I suspect his output lowpass filter (seen in the photos but
>not on the schematic) is part of the matching network.
>
>I'm really surprised that with the construction and documentation
>presented he could get FCC type acceptance.

Hi Wes,

Still and all, a good story of the exploit.

Well given the measurements, it seemed some filtering was necessarily
unmentioned. And given the FCC type acceptance (obviously allowed),
the measurements (or rather the quality of the gear) were sufficient.
I especially find the scrawled notes submitted with the acceptance
application a time capsule back to the days before computers (or
seemingly the IBM selectric).

Still and all, he described where he was going, and offered how he
thought he got there. To translate that to today's specifications
"missing" the output Z of transmitters (obviously part and parcel to
the canon of the design engineer who built them) because of their
irrelevance - that is a stretch of imagination right off the showroom
floor. And then to notice in the ad copy, they can build to other
output Z's...

I find the novel modulation techniques interesting though. Seems like
an alphabet soup of modes has sprung up over the years.

73's
Richard Clark, KB7QHC

2989. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 03:29:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7uusj0ltup1rc4ubk0uekjshi5g8rk0lu0@4ax.com>
Source record: 89810

On Wed, 08 Sep 2004 02:42:21 GMT, Dave Shrader
<david.shrader@comcast.net> wrote:
>Cecil, methinks you posed an incomplete question :-)

WHAT!!? NEVER! Well hardly ever (apologies to G&S).

2990. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 12:17:03 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <413ef9c7_1@corp.newsgroups.com>
Source record: 89811

Dave Shrader wrote:

> Cecil Moore wrote:
>> Assume a 100+j100 ohm load and a 100-j100 ohm transmitter
>> directly connected with no transmission line. The system
>> is matched. Are there any reflections? Now install a
>> transmission line. Will an SWR meter read the same thing
>> in both cases?
>
> What's the Zo of the transmission line? Is it sufficiently long to act
> as a transmission line?
>
> Cecil, methinks you posed an incomplete question :-)

Yep, a deliberate act to get you to consider all possibilities.
What Z0 did you assume? For what Z0 is your SWR meter calibrated?
--
73, Cecil http://www.qsl.net/w5dxp

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
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2991. What ground arrangements should I make for my 20 metre long marconi antenna.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 13:28:00 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2q8fkvFste59U1@uni-berlin.de>
Source record: 89812

Hi. I want to work 160, 80 and 40 with a 20 metre length of wire (fed into an atu) that is to be supported between a mast and a pole on the house chimney stack.

Here is a plan of my garden:

8.6 metres

```
_________________________________
\ x A |
\ |
\ | 5.8 metres
\ |
\ |
\_C_____________________B_|
```

6.4 metres

x is where the antenna will connect to the atu.

distance from x to A is 7.8m
distance from x to B is 9.4m
distance from x to C is 5.4m

the angle at x, from points A and C is 73 degrees, so any ground wires centered on point x would fan out 73 degrees..

Okay, what ground arrangements should I make? Do I drive in 2 or 3 2 metre ground rods at point x and as many ground wires 6 inches below the surface fanning out from point x, or what? Would I also connect a conterpoise wire or wires to point x running a foot or so above ground?

Thanks for any advice.

Rich.

2992. free standing pole for antenna to receive broadband access

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 13:50:54 UTC
From: ljdokar@provalue.net
Message-ID: <96c9ec00.0409080550.718ae6af@posting.google.com>
Source record: 89813

I need info on building a free standing 50 foot pole. It is my best alternative to get broadband internet access.

I am concerned about lightning and sway.

I am thinking about using steel pipe, in sections, set in a concrete base with a rotor on top of the pole.

2993. Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 14:25:35 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2q8j0gFrrtu1U1@uni-berlin.de>
Source record: 89814

Just wondering: If you had a 33 foot horizontal wire, fed at one end with a ladder line, which was connected to an atu, it would work on 20 metres, but would it work on 40, 80 and 160metres? TIA.

2994. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 14:51:10 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <y%E%c.1586$qg4.149098@twister.southeast.rr.com>
Source record: 89815

"Bill Turner" <noway@nohow.com> wrote in message
news:na2ij01ma262ctink8m8rbc4ius4l48ooi@4ax.com...
> On Fri, 03 Sep 2004 17:19:26 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >You can get an idea of resistance to ground by
> >connecting 120 VAC to the ground system through a fuse and see how big
of a
> >fuse you can blow. I rigged a fuse holder with a neon blown fuse
indicator
> >to a piece of PVC pipe. last time I checked mine it would pop a 10amp
fuse.
>
> --
>
> Remember the movie "Dumb and Dumber"? This is the electronic version.
>
> --
> Bill, W6WRT
> QSLs via LoTW
>
Thats what I thought the first time I saw it done but this is the way the
power company checks grounds. It can be done in a safe manner. Also there is
equipment commercially made for doing this test. Ideally one should use this
approved equipment but there is no reason it cant be done with improvised
equipment with no more risk than taking a voltage measurement in a hot
chassis. Of course there are those who lack the ability to safely perform a
test like this and should not even be allowed in their service panel to
reset a breaker.

2995. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 15:38:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bm9uj09085es98heoobvgfg18uhhqe0jka@4ax.com>
Source record: 89816

On Wed, 08 Sep 2004 07:17:03 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:
>What Z0 did you assume?
He hardly ever says a BIG BIG Z! ...well give three cheers and three
cheers more... (further apologies to G&S)

2996. Re: free standing pole for antenna to receive broadband access

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 15:43:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1u9uj0lv9i76u62g6erfjq3ofipl14oc9a@4ax.com>
Source record: 89817

On 8 Sep 2004 06:50:54 -0700, ljdokar@provalue.net (Larry) wrote:
>I need info on building a free standing 50 foot pole...with a rotor on top of the pole.

Hi Larry,

This pole is called a tower.

73's
Richard Clark, KB7QHC

2997. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 15:50:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k3auj01udbh5qnn2fch9qrbqei58gccfb1@4ax.com>
Source record: 89818

On Wed, 8 Sep 2004 15:25:35 +0100, "Richard"
<nearlynews_email@ntlworld.com> wrote:

>Just wondering: If you had a 33 foot horizontal wire, fed at one end with a
>ladder line, which was connected to an atu, it would work on 20 metres, but
>would it work on 40, 80 and 160metres? TIA.

Hi Rich,

It might, but your atu might not. ATUs are not a one-size-fits-all
solution. In fact they fit very few problems that are not already
pretty close (and what you describe above and in other posts is
definitely not close). Maybe two bands will pull in, the others will
not (unless the loss of the ATU adds to the appearance of being
"tuned").

73's
Richard Clark, KB7QHC

2998. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 16:09:12 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <I8G%c.1616$qg4.152449@twister.southeast.rr.com>
Source record: 89819

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10jlosal8dh6mf8@corp.supernews.com...
>
> Ian White, G3SEK wrote:
> > Roy Lewallen wrote:
> >>
> >> My NEC book is getting pretty old now, 1990, but at that time,
> >> multiple grounds were often not only permitted, but required. And a
> >> *minimum* spacing was sometimes specified.
> >>
> >> For example, section 250-84, Resistance of Made Electrodes: "A single
> >> electrode consisting of a rod, pipe, or plate which does not have a
> >> resistance to ground of 25 ohms or less shall be augmented by one
> >> additional electrode of any of the types specified in Sections 250-81
> >> or 250-83. Where multiple rod, pipe, or plate electrodes are installed
> >> to meet the requirements of this section, they shall be not less than
> >> 6 (1.83m) apart."
> >
> >
> > Is it something like this? Multiple ground rods are permitted
> > (encouraged, even) in order to establish one good ground connection; but
> > the wiring system can have only one ground connection.
>
> Well, yes and no. As I read it, all the ground electrodes have to be
> connected to the service box, as they are at my house. I have a
> water-pipe ground and a ground rod; they're physically widely separated,
> and each has its own conductor going back to the service box. So I guess
> you could call the service box a single "ground connection". The neutral
> and safety ground conductors of each circuit are individually grounded
> at the service box also, giving further support to interpreting its
> function as a single ground connection. A number of ground methods and
> devices are approved, such as buried rods or plates, concrete grounds,
> or (in my old code book anyway), water pipe ground. Some can be used
> alone and others need a second ground device as a supplement. When
> multiple ground rods are used, the code has requirements for bonding
> them to each other.
>
> Roy Lewallen, W7EL
Using a cold water pipe is a bad idea and is not allowed by some local codes
even though it may be allowed by the national code. This is partly because
it should only be connected to the ground system at one point and it is too
easy to connect it at more than one. Also there is the possible interaction
with gas lines and plumbers and home owners sometimes modify plumbing in
ways that make them poor grounds..

2999. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 16:26:34 UTC
From: richardharrison@webtv.net
Message-ID: <28957-413F32BA-43@storefull-3256.bay.webtv.net>
Source record: 89721

Andrey wrote:
"I want to create horizontally polarized antenna, low profile, located above large ground plane. And I need it to be omnidirectional (sort of) and have sufficient gain in horizontal plane.

My frequency of interest is 900 MHz. The ground plane is a roof of a car."

A horizontal dipole above a metal car roof is a poor choice.

Polarization choice at 900 MHz does not affect signal range.

In the horizontal plane, the direct signal broadside to the dipole is cancelled by the reflected signal from the roof unless you elevate the dipole by 50 cm or so at 900 MHz. That`s almost 2 wavelengths. At that height, the omnidirectionality may not be even "sort of".

Better to use a vertical which has a signal null off its tip and maximum radiation in the horizontal plane. This can be a collinear made of 1/2-wave sections separated by 1/4-wave stub(s) for gain. As the wavelength is only 34 centimeters, this isn`t much of a problem. It could be made by bending a single length of stiff wire.

Best regards, Richard Harrison, KB5WZI

3000. Place the GPS antenna directly on the ground plane?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 16:30:06 UTC
From: Q <oink@gazeta.gov.pl>
Message-ID: <chnc33$b5j$1@atlantis.news.tpi.pl>
Source record: 89820

I have Trimble embedded 3.3V GPS unpackaged antenna
and a home-made ground plane (60x60x1.3mm sheet metal);

Can I put the GPS antenna directly on the ground plane
(than the ground plane would contact with antenna's GND)
or place some dielectric between?
(what kind and size of dielectric?)

I have oem GPS receiver Lassen SQ;
Can I put that GPS antenna directly on it?

ps.
I read "Basic Guidelines for the use of the
Ultra-Compact Embedded Antenna",
but I didn't find there any info :(.

3001. Re: Place the GPS antenna directly on the ground plane?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 16:46:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10judqicjudqb5e@corp.supernews.com>
Source record: 89722

You won't harm the antenna by putting it directly on the ground plane.
So try it, and see if your signal improves.

I'm not familiar with the particular antennas you mention, but I'll bet
someone at sci.geo.satellite-nav would be.

Roy Lewallen, W7EL

Q wrote:

> I have Trimble embedded 3.3V GPS unpackaged antenna
> and a home-made ground plane (60x60x1.3mm sheet metal);
>
> Can I put the GPS antenna directly on the ground plane
> (than the ground plane would contact with antenna's GND)
> or place some dielectric between?
> (what kind and size of dielectric?)
>
> I have oem GPS receiver Lassen SQ;
> Can I put that GPS antenna directly on it?
>
> ps.
> I read "Basic Guidelines for the use of the
> Ultra-Compact Embedded Antenna",
> but I didn't find there any info :(.
>
>

3002. Re: free standing pole for antenna to receive broadband access

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 17:11:48 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <o3H%c.17537$J45.11862@newssvr29.news.prodigy.com>
Source record: 89723

Richard Clark wrote:

> On 8 Sep 2004 06:50:54 -0700, ljdokar@provalue.net (Larry) wrote:
>
>>I need info on building a free standing 50 foot pole...with a rotor on top of the pole.
>
>
> Hi Larry,
>
> This pole is called a tower.
>
> 73's
> Richard Clark, KB7QHC

Hi Larry- If what you really ment was a "Utility Pole" aka power pole, telephone pole, then once you have it planted, and you wish to mount a rotor on it, can be done quite easily, as long as you have the bottom pipe mount for your rotor. at the top of the pole, you will need to drill a couple of holes thru the pole , useing 5/8 bit. Next: you need a chisle - notch about 1 inch deep notch in the pole, perpendicular to the pole (horizontal) Now get couple of pieces of 5/8 inch all-thread- if you are good with a torch, bend a section of the all-thread into a circle, slightly bigger than the pipe to support your rotor (or find a metal smith to do it for you) and be sure to weld the end of this loop to the part where the circle started to be formed. On the notched end, insert your all-thread - DO NOT USE A WASHER! on the un-notched end, use a washer, and nut. Run your pipe thru the loops of the all-thread, then tighten the nut on the allthread. as the loops suck into the notchs of the pole, it will pinch your support pipe, and becomes quite tight! and will support at least couple hundred pounds! Another tactic used is get the mounting hardware from d.b. products for their db-222 antenna this will allow mounting a pipe to a pipe- now what you want is thrubolt to pipe. one of the looped pieces needs to be replaced, with a piece of channel iron, drilled to mate the rest of the mounting hardware parts, and then drilled thru the center for your thru bolt. Have seen these hold up with several hundred pounds of ice and not break! And, be sure to run a GOOD ground to this mount, for lightning protection! as info,
Jim NN7K

3003. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 17:26:35 UTC
From: richardharrison@webtv.net
Message-ID: <12865-413F40CB-85@storefull-3257.bay.webtv.net>
Source record: 89724

Jimmy wrote:
"Using a cold water pipe is a bad idea and is not allowed by some local codes even though it may be allowed by the national code."

You don`t want to be electrocuted when holding an electric appliance and a cold water valve simultaneously.

My electric company, the former Houston Lighting and Power Company, writes:
"All services shall be properly grounded. Note - NEC requires grounding to a "metallic underground water piping system" if available. Acceptable alternatives include a driven ground rod which is preferred by HL&P Co. regardless of the type grounding electrode used. NEC requires that the "interior cold water pipimg system" be bonded to it."

Best regards, Richard Harrison, KB5WZI

3004. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 17:56:07 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <0YOBLea3e0PBFAxw@ifwtech.co.uk>
Source record: 89725

Richard Harrison wrote:
>
>My electric company, the former Houston Lighting and Power Company,
>writes:
>"All services shall be properly grounded. Note - NEC requires grounding
>to a "metallic underground water piping system" if available. Acceptable
>alternatives include a driven ground rod which is preferred by HL&P Co.
>regardless of the type grounding electrode used. NEC requires that the
>"interior cold water pipimg system" be bonded to it."

That last point is the same in the UK. Gas and water supplies are never
relied on to provide an electrical ground, but they must be bonded to
the electrical supply ground.

Additional local bonding is also required for all metalwork in bathrooms
and shower rooms.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3005. Re: What ground arrangements should I make for my 20 metre long mar...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 17:56:54 UTC
From: richardharrison@webtv.net
Message-ID: <12866-413F47E6-18@storefull-3257.bay.webtv.net>
Source record: 89726

Richard wrote:
"I want to work 160, 80 and 40 with a 20 metre length of wire (fed into an atu) that is to be supported by a mast and a pole on the house chimney stack."

The wire to earth from your atu is a part of your antenna even if you don`t ground its far end. If you desire a strong vertical component to your radiation, put as many radials in your garden as possible to minimize the distance displacement current flows to reach a copper earth return wire.

Best regards, Richard Harrison, KB5WZI

3006. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 19:18:03 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <d7muj0t2jo9j434acdc4ab7teikgeipeh8@4ax.com>
Source record: 89727

On Wed, 8 Sep 2004 12:26:35 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

|Jimmy wrote:
|"Using a cold water pipe is a bad idea and is not allowed by some local
|codes even though it may be allowed by the national code."
|
|You don`t want to be electrocuted when holding an electric appliance and
|a cold water valve simultaneously.

No kidding. I added a laundry room and attached garage to my house. The former owner/builder had intentions to do something similar but had not for whatever reason. He had stubbed out hot water from the house (concrete slab on grade, pipes under slab) but not cold water.

I ran an exterior cold supply from the service entrance using PVC underground and copper inside. I added another ground rod and 100' of 4 AWG buried at the base of the new footing and grounded the new cold supply with it.

IMHO you can't have too many ground connections.
|
|My electric company, the former Houston Lighting and Power Company,
|writes:
|"All services shall be properly grounded. Note - NEC requires grounding
|to a "metallic underground water piping system" if available. Acceptable
|alternatives include a driven ground rod which is preferred by HL&P Co.
|regardless of the type grounding electrode used. NEC requires that the
|"interior cold water pipimg system" be bonded to it."
|
|Best regards, Richard Harrison, KB5WZI

3007. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 19:21:46 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2q94biFs9aqhU1@uni-berlin.de>
Source record: 89728

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:k3auj01udbh5qnn2fch9qrbqei58gccfb1@4ax.com...
> On Wed, 8 Sep 2004 15:25:35 +0100, "Richard"
> <nearlynews_email@ntlworld.com> wrote:
>
> >Just wondering: If you had a 33 foot horizontal wire, fed at one end
with a
> >ladder line, which was connected to an atu, it would work on 20 metres,
but
> >would it work on 40, 80 and 160metres? TIA.
>
> Hi Rich,
>
> It might, but your atu might not. ATUs are not a one-size-fits-all
> solution. In fact they fit very few problems that are not already
> pretty close (and what you describe above and in other posts is
> definitely not close). Maybe two bands will pull in, the others will
> not (unless the loss of the ATU adds to the appearance of being
> "tuned").
>
> 73's
> Richard Clark, KB7QHC

Hi.

I know the zeppalin antenna I described works when the top wire is a half wavelength or greater. I was just wondering if the set up (ie 10 metre length of top) might at least be a good as a 20 metre long inverted L (well, L on it's side) on 40, 80 & 160, using a not very good ground arrangement.

Thing with the zepp is that there is no ground losses. Thing is, ground losses with inverted L are probably replaced by greater atu losses? And of course the inverted L would radiate also from the vertical section which migh be useful. I do wonder of the two arrangements, which would be better. I wonder also whther I might not get a true balance on the open line when the top is less than half a wavelength.

3008. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 20:29:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9jquj0tiarph39vurkv4ockt8genlrjqa9@4ax.com>
Source record: 89729

On Wed, 8 Sep 2004 20:21:46 +0100, "Richard"
<nearlynews_email@ntlworld.com> wrote:

>I know the zeppalin antenna I described works when the top wire is a half
>wavelength or greater.

Hi Rich,

You also need to consider the length of the transmission line (what
makes the Zeppelin work with your rig).

> I was just wondering if the set up (ie 10 metre
>length of top) might at least be a good as a 20 metre long inverted L (well,
>L on it's side) on 40, 80 & 160, using a not very good ground arrangement.

For 160 it is quite short, for 80 somewhat short; but being short is
not a sin in and of itself. What is a sin is what the tuner has to
put up with. Most ATU's only cope with up to 3:1 SWR. A short
antenna may well exceed that. Obtain a copy of EZNEC (using the free
version) and give yourself an education on what to expect.
>
>Thing with the zepp is that there is no ground losses. Thing is, ground
>losses with inverted L are probably replaced by greater atu losses? And of
>course the inverted L would radiate also from the vertical section which
>migh be useful. I do wonder of the two arrangements, which would be better.
>I wonder also whther I might not get a true balance on the open line when
>the top is less than half a wavelength.

You won't have a true balance unless you are feeding a true balanced
antenna (which a Zepp is not, nor an inverted L).

73's
Richard Clark, KB7QHC

3009. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 21:24:53 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <FMK%c.1866$9N5.172362@twister.southeast.rr.com>
Source record: 89730

"Bill Turner" <noway@nohow.com> wrote in message
news:m1auj0dqrlgph0t24bvh0odct56imgpjve@4ax.com...
> On Wed, 08 Sep 2004 14:51:10 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >Thats what I thought the first time I saw it done but this is the way the
> >power company checks grounds.
>
> --
>
> I can't believe a power company could be dumb enough to blow a fuse to
> measure (?) ground resistance.
>
> A much better way would be to use either a variac or a current-limited
> source and calculate the resistance with Ohm's law.
>
In what way better, They are not interested in a specific value in most
cases. Just a go -no go test. Plug the tester into an outlet, touch it to
the ground stake after isolating ground from neutral. Fuse pops or it
doesnt, Ground meets spec or it doesnt. Apparently there are lot of people
who think this idea is not so dumb since the tester they use is commercially
available, a fact that I mentioned in the previous post that you chose to
ignore.

> --
> Bill, W6WRT (founder of the Society to Prevent Fuse Abuse)
> QSLs via LoTW
>

3010. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 21:44:01 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chnuf1$5tr$1@hercules.btinternet.com>
Source record: 89731

> God bless the Cween.
>
> Walt
==========

Really Walt, the introduction of God and the royal family to your conjugal match philosophy is a little far-fetched. I never suspected it but what brand of Bourbon are you on tonight? I recognise the symptoms.

(Funny smiley)

Reg.

3011. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 21:53:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5lvuj0tlctnn1fmer99cdradahqagjb1jt@4ax.com>
Source record: 89732

On Wed, 08 Sep 2004 21:24:53 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:
>They are not interested in a specific value in most cases.
...
>Ground meets spec or it doesnt.

Without a specific value, how do they (we) know it meets spec?

73's
Richard Clark, KB7QHC

3012. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 22:55:12 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <p5M%c.6977$OZ6.537@okepread06>
Source record: 89733

Read up on the topic of linear loading. You can bend that wire back on itself and increase the total length of wire. There are discussions of this in ON4UNs Low Band Dxing book. One commercial example is the Cobra Ultralite at http://www.k1jek.com/.

I use a top center fed L. One side is horizontal and the other side is vertical. Fed at the top center with ladder line. Cebik has several articles on his site about center fed Ls. No ground plane, horizontal and vertical polarization, fewer nulls in the pattern. Very nice

I think the center feds make a lot more sense for multiband operation.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:2q8j0gFrrtu1U1@uni-berlin.de...
> Just wondering: If you had a 33 foot horizontal wire, fed at one end with
> a
> ladder line, which was connected to an atu, it would work on 20 metres,
> but
> would it work on 40, 80 and 160metres? TIA.
>

3013. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-08 23:22:27 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <UuM%c.173651$Lj.145677@fed1read03>
Source record: 89734

"Craig Buck" <k4ia@cox.net> wrote

> I use a top center fed L. One side is horizontal and the other side is
> vertical. Fed at the top center with ladder line. Cebik has several
> articles on his site about center fed Ls. No ground plane, horizontal and
> vertical polarization, fewer nulls in the pattern. Very nice
>
> I think the center feds make a lot more sense for multiband operation.
>
> --
> Radio K4ia
> Craig "Buck"
> Fredericksburg, VA USA
> FISTS 6702 cc 788 Diamond 64

Hi Craig, is that fed with ladder line right out of the tuner? I'm hoping there is a best-fit arangement from my tuner to an inverted-L with either a top-fed through a 4:1 balun or end-fed without a balun. In either case the intention is to cover 2182khz with a 107' 1/4~ L. Any suggestions on the best arrangement for that work?

Thanks,

Jack
Virginia Beach VA

3014. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 00:06:36 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jv7kfo5eenc97@corp.supernews.com>
Source record: 89735

Thanks to all who responded. I see I've been misusing "ground wave" for a long time, in place of "surface wave". And my apology to those I've questioned about "ground wave" propagation at VHF/UHF. According to correct usage, it does indeed exist -- just not with a surface wave component.

Roy Lewallen, W7EL

3015. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 00:36:49 UTC
From: DGoncz@aol.com
Message-ID: <5d8971ea.0409081636.7f5daf5a@posting.google.com>
Source record: 89736

Gosh, is my face pink.

You all were right when you wrote to use a balun and 75 ohm coax, not twinax line to run to the input of the radio. The ring connector on the OEM dipole is a copy-protection throwoff. The true connection is that one leg is _grounded_ to the sleeve/barrel/chassi, and the other is connected to the tip terminal. I determined this with a sewing pin to penetrate the dipole insulation and an ohmmeter.

But Don Foreman is instructing me in how to rewind my 300:75 ohm balun to 75:75 ohms for the open six element triple drive antenna so my face isn't red. That is, I am learning something.

Later, in my shop, I will install the balun core to the Wizard board and go back to the twinax, so that the Wizard can accept a the big antenna the way it is now, but with the plug in all the way instead of just part way, or a new flexible open dipole that is a true balanced dipole and doesn't have one leg grounded. It can be made from a bit of twinax, or the existing dipole can simply be soldered to a fresh TRS connector.

Do any of you know a software patch to get lower than 88 MHz on the Wizard? I'd like to listen to ATC.

Doug

3016. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 01:07:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mmavj013s0tfjcau44t6bvjfc26atqbod1@4ax.com>
Source record: 89737

On 8 Sep 2004 17:36:49 -0700, DGoncz@aol.com (Doug Goncz) wrote:

>You all were right when you wrote to use a balun and 75 ohm coax, not
>twinax line to run to the input of the radio.

Hi Doug,

This probably won't make much difference, because it is hardly an
application killer.

>Do any of you know a software patch to get lower than 88 MHz on the
>Wizard? I'd like to listen to ATC.

Lower than 88MHz? To what? 550KHz AM?

73's
Richard Clark, KB7QHC

3017. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 01:13:22 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <Y6O%c.7112$OZ6.5222@okepread06>
Source record: 89738

You can go with ladder line right out of the tuner or to a short piece of coax to a balun, then to ladder line. I have about ten feet of coax to a 1:1 balun outside. The coax is easier to get out of the house and away from things that might unbalance the ladder line. Loss on such a short piece of coax is negligible even at high SWRs on HF.

Whether you use a 4:1 or 1:1 depends on the antenna and feedline. I use a 1:1. Your antenna will be the "right" length so the impedance at the transmitter end won't be too far off from 70 ohms. A 4:1 balun would be a mistake as it would lower the impedance making it harder to match the transmitter.

I have to ask, "Why are you using ladder line?" Usually it is only used when the antenna has a high SWR and we want to avoid losses in the coax. You won't have much of a mismatch, if any. I would think you would go with coax, you might not even need a tuner.
--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

"Jack Painter" <223bthp@cox.net> wrote in message
news:UuM%c.173651$Lj.145677@fed1read03...
>
> "Craig Buck" <k4ia@cox.net> wrote
>
> > I use a top center fed L. One side is horizontal and the other side is
>> vertical. Fed at the top center with ladder line. Cebik has several
>> articles on his site about center fed Ls. No ground plane, horizontal
>> and
>> vertical polarization, fewer nulls in the pattern. Very nice
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>> I think the center feds make a lot more sense for multiband operation.
>>
>> --
>> Radio K4ia
>> Craig "Buck"
>> Fredericksburg, VA USA
>> FISTS 6702 cc 788 Diamond 64
>
> Hi Craig, is that fed with ladder line right out of the tuner? I'm hoping
> there is a best-fit arangement from my tuner to an inverted-L with either
> a
> top-fed through a 4:1 balun or end-fed without a balun. In either case the

> intention is to cover 2182khz with a 107' 1/4~ L. Any suggestions on the
> best arrangement for that work?
>
> Thanks,
>
> Jack
> Virginia Beach VA
>
>

3018. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 02:14:39 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <j0P%c.174706$Lj.167623@fed1read03>
Source record: 89739

Thanks Craig - and if you could, please elaborate on these design considerations:

The antenna is not erected yet - still planning. I would choose a 1:1 balun if I used one at all with an end-fed inverted-L configuration. But if I configure the antenna as a sloper (same L-shape) and top-feed at the angle point, then I thought a 4:1 balun could help make 2182khz tunable on an antenna with dipole properties that is really too short (would have to be 107' each leg not 107' total, which is about all I can get at that location). Of those two choices, I had not intended to use ladderline for either, but would consider it if some benefit was possible. Ideally, the antenna would be desireable to cover 2-20mhz. No compromse on the 2182 end is worth the upper bandwidth though, with 5.7 & 8.9 mhz the other requirements that should not unduly strain a tuner under high tx power. The antenna would be primarily for 2182 - 4125 khz.. Thanks for any help.

Jack

"Craig Buck" <k4ia@cox.net> wrote in message
news:Y6O%c.7112$OZ6.5222@okepread06...
> You can go with ladder line right out of the tuner or to a short piece of
> coax to a balun, then to ladder line. I have about ten feet of coax to a
> 1:1 balun outside. The coax is easier to get out of the house and away
from
> things that might unbalance the ladder line. Loss on such a short piece
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> transmitter end won't be too far off from 70 ohms. A 4:1 balun would be a
> mistake as it would lower the impedance making it harder to match the
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> > "Craig Buck" <k4ia@cox.net> wrote
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> >> vertical polarization, fewer nulls in the pattern. Very nice
> >>
> >> I think the center feds make a lot more sense for multiband operation.
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> >> --
> >> Radio K4ia
> >> Craig "Buck"
> >> Fredericksburg, VA USA
> >> FISTS 6702 cc 788 Diamond 64
> >
> > Hi Craig, is that fed with ladder line right out of the tuner? I'm
hoping
> > there is a best-fit arangement from my tuner to an inverted-L with
either
> > a
> > top-fed through a 4:1 balun or end-fed without a balun. In either case
the
> > intention is to cover 2182khz with a 107' 1/4~ L. Any suggestions on
the
> > best arrangement for that work?
> >
> > Thanks,
> >
> > Jack
> > Virginia Beach VA
> >
> >
>
>

3019. Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 03:08:09 UTC
From: Ron <rmrippy@hotmail.com>
Message-ID: <tOP%c.1945$9N5.205176@twister.southeast.rr.com>
Source record: 89740

What is the available power, Pa in picowatts, that can be extracted from a free space field of Ea microvolts per meter?

A reference I have says it is:

Pa = Ea squared multiplied by Ae (the antenna effective area) all divided by 2Zo, where Zo = 377 ohms, the impedance of free space.

My question is why 2Zo rather than just Zo. Is it because only half of the power in the field can be extracted and delivered to a load?

Ron, W4TQT

3020. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 04:17:56 UTC
From: richardharrison@webtv.net
Message-ID: <3014-413FD974-115@storefull-3251.bay.webtv.net>
Source record: 89741

Reg wrote:
"Really Walt, the introduction of God and the royal family to your conjugal match philosophy is a little far-fetched."

They like to be on the right side too, but sometimes even the royals are wrong.

I went all the way to London in july to wade in the Diana Ditch. When I arrived, it was surrounded by a wire fence posted with this notice:

"Diana, Princess of Wales Memorial Fountain -

There have been a number of slippage incidents in a section of the Fountain.

The safety of our visitors is very important to us. As a precaution, there will be no acess to the Fountain until a full investigation has been completed.

We apologise for this inconvenience.

The Royal Parks."

Well written explanation. Maybe next year? My 5 year old granddaughter, a student in Queen`s College, enjoyed the Hyde Park Lido, so the outing was rewarding anyway.

Best regards, Richard Harrison, KB5WZI

3021. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 05:22:41 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040909012241.10671.00000491@mb-m04.aol.com>
Source record: 89742

Hi Dale,

Are you saying that the old saturn halo was not 3 loops? It sure looks like it in the pictures that I have seen.

I know that your design (the Par Omniangle) is not the classic 1/2 wave halo, and does offer more advantages over a halo. I sure wish I had a 2m and 6m for the upcoming VHF contest.

Randy ka4nma

3022. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 05:47:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9ervj0l5vlh3lhp48ct43jsootie7o63ca@4ax.com>
Source record: 89743

On Wed, 8 Sep 2004 23:17:56 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Reg wrote:
>"Really Walt, the introduction of God and the royal family to your
>conjugal match philosophy is a little far-fetched."
>
>They like to be on the right side too, but sometimes even the royals are
>wrong.

Perhaps Reggie is more a fan of the Sex Pistols:
"God save the Queen
the fascist regime,
they made you a moron
a potential H-bomb."
(my regrets to G&S)

3023. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 06:07:27 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <3V0RoYDfM$PBFAAh@ifwtech.co.uk>
Source record: 89744

Roy Lewallen wrote:
>Thanks to all who responded. I see I've been misusing "ground wave" for
>a long time, in place of "surface wave". And my apology to those I've
>questioned about "ground wave" propagation at VHF/UHF. According to
>correct usage, it does indeed exist -- just not with a surface wave
>component.

Likewise, my apologies to anyone whom I've misled.

But I apologise with fingers crossed behind my back!

The IEEE Dictionary mavens have produced a very HF-centric definition of "ground wave", by defining it to include all modes of propagation except "sky wave"; where "sky" is exclusively defined as "ionospheric".

This definition completely ignores all the non-ionospheric VHF/UHF propagation modes that don't involve the ground at all.

Since a misleading definition is worse than no definition at all, the best policy for the term "ground wave" is to label it "Broken - Do Not Use".

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3024. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 06:38:23 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <6UkCo4Ffp$PBFAhP@ifwtech.co.uk>
Source record: 89745

Craig Buck wrote:
>Read up on the topic of linear loading. You can bend that wire back on
>itself and increase the total length of wire. There are discussions of
>this in ON4UNs Low Band Dxing book. One commercial example is the
>Cobra Ultralite at http://www.k1jek.com/.
>
>I use a top center fed L. One side is horizontal and the other side is
>vertical. Fed at the top center with ladder line. Cebik has several
>articles on his site about center fed Ls. No ground plane, horizontal
>and vertical polarization, fewer nulls in the pattern. Very nice
>
>I think the center feds make a lot more sense for multiband operation.
>
You're absolutely right, Craig... in principle.

But Richard's situation reflects the reality for many British hams whose house is at one end of a short and narrow rear lot. With neighbors very close on all sides, we're lucky to have even one mast, so center-fed antennas are often not very practical for us - they either sag in the middle or wind up in a very sharp inverted-V configuration.

As a result, we're very much forced towards considering end-fed or base-fed solutions.

However, I wouldn't go near an end-fed long wire or zepp configuration, because of the very high risk of feeding the RF return currents into the mains. Been there, done that, had the doorbell ring!

Living in that situation myself, my best solution has been a 30-33ft vertical at the far end of the garden, fed against the best ground system I can manage. This can be fed directly on 7MHz; with an ATU at the base it is good for 10, 14 and 18MHz, and is usable on the higher bands too.

Over the years, this system has acquired an auto-ATU at the base, and has evolved into a guyed tilt-over mast with various quick-change "accessories" that can be attached at the top. A lightweight 12ft fishing pole makes a taller vertical, which has slowly crept up to 45ft; or a selection of horizontal loading wires running back towards the house at the 33ft level make inverted-L configurations for the lower bands.

With the auto-ATU, any configuration can easily be loaded on any band. It won't be optimum on more than one HF band, but it will get you on the air on *every* band - and that's what counts for most.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3025. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 06:45:52 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.co.uk>
Message-ID: <SkrIUGgwPBFAHG@ifwtech.co.uk>
Source record: 89746

Richard Clark wrote:
>On Wed, 08 Sep 2004 21:24:53 GMT, "Jimmie" <Gfender@carolina.rr.com>
>wrote:
>>They are not interested in a specific value in most cases.
>...
>>Ground meets spec or it doesnt.
>
>Without a specific value, how do they (we) know it meets spec?

For a mains safety ground, the bottom line is: is the ground resistance low enough to blow a fuse in the live rail? If the answer is no, you're heading for a fire, so there is some surety in verifying that a fuse really will blow.

On the other hand, for an RF ground it's a lousy test.

--
73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

3026. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 06:56:20 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10jvvknnphmap8c@corp.supernews.com>
Source record: 89747

The fact that you can extract only half the power from a wave with a perfectly efficient antenna is already built into Ae. That is, Ae = P/S, where P is the power delivered to a conjugate load and S is the power density of the wave.

I suspect that in your reference, Ea is the *peak*, not RMS, field strength, and that's why the factor of two.

Incidentally, while you can extract only half the power from a wave with a perfectly efficient antenna, it is possible to extract *all* the power from a wave. An anechoic chamber extracts essentially all the power from waves generated within it.

Roy Lewallen, W7EL

Ron wrote:
> What is the available power, Pa in picowatts, that can be extracted from
> a free space field of Ea microvolts per meter?
>
> A reference I have says it is:
>
> Pa = Ea squared multiplied by Ae (the antenna effective area) all
> divided by 2Zo, where Zo = 377 ohms, the impedance of free space.
>
> My question is why 2Zo rather than just Zo. Is it because only half of
> the power in the field can be extracted and delivered to a load?
>
> Ron, W4TQT
>

3027. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 07:14:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chovse$b93$1@hercules.btinternet.com>
Source record: 89748

> My question is why 2Zo rather than just Zo. Is it because only half of the
power
> in the field can be extracted and delivered to a load?
>
==========

Yes. With the current induced in the receiving antenna it doubles as a radiator and re-radiates half the power back into the field. But only when the receiver and antenna are Z-matched.

If not Z-matched then more than half of the energy is re-radiated and less than half of it is accepted by the receiver.

It's a simple case of a conjugate match between a generator and a load which applies whether the antenna is resonant or not.

In series with the antenna's radiation resistance there's a small conductor loss resistance and a corresponding small loss in power efficiency. The radiation resistance changes when in an off-resonance condition and so does efficiency.

But apart from the change in efficiency, provided a conjugate match is maintained, the 50 percent receive/re-transmit condition always holds and even when well away from resonance a receiving antenna can have high efficiency.

It is required only that radiation resistance be considerably greater than conductor loss resistance. Which is rather obvious whichever way one looks at it.

Reg.

3028. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 08:07:20 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2qah7jFt86amU1@uni-berlin.de>
Source record: 89749

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:6UkCo4Ffp$PBFAhP@ifwtech.co.uk...

> But Richard's situation reflects the reality for many British hams whose
> house is at one end of a short and narrow rear lot. With neighbors very
> close on all sides, we're lucky to have even one mast, so center-fed
> antennas are often not very practical for us - they either sag in the
> middle or wind up in a very sharp inverted-V configuration.
>
> As a result, we're very much forced towards considering end-fed or
> base-fed solutions.

Although center-fed is not totally impossible or out of the question, you
are right, a lot of UK hams have small back lots/gardens and so many of us
do tend to seek verticals or end-fed arrangements with the feed point away
from the house. In my particular case, the problem with a vertical is that
it would practically be surrounded on all sides by either trees or the
house, so I'm not sure if going for a vertical alone would be a good idea,
and that's why I'm considering either an inverted-L or zepp or something
better.

> However, I wouldn't go near an end-fed long wire or zepp configuration,
> because of the very high risk of feeding the RF return currents into the
> mains. Been there, done that, had the doorbell ring!

Noted.

> Living in that situation myself, my best solution has been a 30-33ft
> vertical at the far end of the garden, fed against the best ground
> system I can manage. This can be fed directly on 7MHz; with an ATU at
> the base it is good for 10, 14 and 18MHz, and is usable on the higher
> bands too.

Yes. Any vertical at my QTH would be about 10 metres away from the house to
the south, and about 2 metres away from tallish conifers to the north. A
vertical would seem to be hemmed in to me. No clear take of in any direction
actually.

The problem with using a center-fed arrangement, is that the most I could
put up in backgarden would be ap 40 metre doublet as per:

```
x-------------------
| \
| \
| \
| \
| \feedline
```

back garden

But the feed would be at the top of a 10 metre mast. I would have to have
the feedline go in at an angle.

So one thinks perhaps I need to end-feed as per:

```
-------------------
|
|
|
|
|
x
```

back garden

BUT, I could be daring and do this:

```
/ | \
/ | \
/ house \
```

back garden front garden

Erect a 40 dipole, feeding at point of small mast on chimney stack of house.
That means half of the antenna ends up in front garden.

Or even put up cobra:
http://www.k1jek.com/index.html
Junior does not do 160 though.

3029. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 09:04:31 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2qakiaFt4c6rU1@uni-berlin.de>
Source record: 89750

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:2qah7jFt86amU1@uni-berlin.de...

> So one thinks perhaps I need to end-feed as per:
>
> -------------------
> |
> |
> |
> |
> |
> x
>
> back garden
>

Latest thoughts:

If I could get a decent ground (and that's unknown) I bet I could do a lot worse than an inverted -L, to use for 40, 80 and 160.

Best I could do:

```
10m 10m
-----------------------------------------------
| |
| pole on house
| 10m
|
|
x feed
```

back garden front garden

Yep, might be worth a try if I can get a decent ground.

3030. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 13:11:02 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <GDY%c.2405$qg4.222915@twister.southeast.rr.com>
Source record: 89751

"Ian White, G3SEK" <G3SEK@ifwtech.co.uk> wrote in message
news:SkrIUGgwPBFAHG@ifwtech.co.uk...
> Richard Clark wrote:
> >On Wed, 08 Sep 2004 21:24:53 GMT, "Jimmie" <Gfender@carolina.rr.com>
> >wrote:
> >>They are not interested in a specific value in most cases.
> >...
> >>Ground meets spec or it doesnt.
> >
> >Without a specific value, how do they (we) know it meets spec?
>
> For a mains safety ground, the bottom line is: is the ground resistance
> low enough to blow a fuse in the live rail? If the answer is no, you're
> heading for a fire, so there is some surety in verifying that a fuse
> really will blow.
>
> On the other hand, for an RF ground it's a lousy test.

True enough on the RF , but no worse than any other test meant for primary
power. While this test alone does not insure a good RF ground and it is a
good first test to let you know you are going in the right direction. If
this test is bad for 60Hz AC then RF ground is probably a lot worse. VSWR
reading for my antenna is 1.25:1 at the resonant frequency of my antenna.
Given the inaccuracies of SWR meters I figure I have a ground resistance
some where between 3 and 10 ohms. Maybe one day I will try to to get a more
accurate reading when other things in my life take less priority.

>
>
> --
> 73 from Ian G3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

3031. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 13:25:44 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <sRY%c.2411$qg4.223327@twister.southeast.rr.com>
Source record: 89752

"Wes Stewart" <n7ws_@_yahoo.com> wrote in message
news:d7muj0t2jo9j434acdc4ab7teikgeipeh8@4ax.com...
> On Wed, 8 Sep 2004 12:26:35 -0500, richardharrison@webtv.net (Richard
> Harrison) wrote:
>
> |Jimmy wrote:
> |"Using a cold water pipe is a bad idea and is not allowed by some local
> |codes even though it may be allowed by the national code."
> |
> |You don`t want to be electrocuted when holding an electric appliance and
> |a cold water valve simultaneously.
>
> No kidding. I added a laundry room and attached garage to my house.
> The former owner/builder had intentions to do something similar but
> had not for whatever reason. He had stubbed out hot water from the
> house (concrete slab on grade, pipes under slab) but not cold water.
>
> I ran an exterior cold supply from the service entrance using PVC
> underground and copper inside. I added another ground rod and 100' of
> 4 AWG buried at the base of the new footing and grounded the new cold
> supply with it.
>
> IMHO you can't have too many ground connections.
> |
> |My electric company, the former Houston Lighting and Power Company,
> |writes:
> |"All services shall be properly grounded. Note - NEC requires grounding
> |to a "metallic underground water piping system" if available. Acceptable
> |alternatives include a driven ground rod which is preferred by HL&P Co.
> |regardless of the type grounding electrode used. NEC requires that the
> |"interior cold water pipimg system" be bonded to it."
> |
> |Best regards, Richard Harrison, KB5WZI
>
Should re read what I write sometimes. I was refering to using the water
pipe as the sole ground for your electrical system. This used to be a common
thing and pemissable by the NEC, not sure if it still is.

3032. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 15:10:28 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <93s0k0pfc4os2v8lv6uidrtn0c325ov84p@4ax.com>
Source record: 89753

On Sat, 04 Sep 2004 20:28:58 GMT, "ku4yp" <ku4yp@verizon.net> wrote:

>i thank you all for the comments.
>
> to tie into the electirical service will be a pain as the electrical
>gound is on the total oposite end of the house from the shack. i'll have to
>work something out there. water pipe grounding will not be a problem.
>
> i can see i have much more reading to do.
>
> thanks agian, mike

When we had an electrician upgrade the incoming electrical service box on my mother's house (circa 1960), he ran a large 8 gauge wire from the box at the end of the garage, along the wall of the house all the way to the incoming water line from the street near the other end of the basement, where he tied it to ground next to the water meter.

The National Electrical Code has changed, and those in older houses might consider upgrading to current code (no pun intended) even if not actually required.

In industrial situations, I have had to deal with ground loop problems, which are a PITA to find. Do your grounding correctly, and you will be safer, and have an easier time of it.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

3033. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 15:41:17 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <aut0k05h1q26j1f20o1bu6j4jci6mfcvmm@4ax.com>
Source record: 89754

On Thu, 09 Sep 2004 15:10:28 GMT, Gary S. <Idontwantspam@net> wrote:
[snip]
|In industrial situations, I have had to deal with ground loop
|problems, which are a PITA to find. Do your grounding correctly, and
|you will be safer, and have an easier time of it.

You should have seen the problems I had when I had the house electricians wiring up an r-f shielded room. Trying to convince them that they had to run just *one* ground wire from a single point on the room to a building ground and not the service entrance ground *and* that the wire couldn't be bare and laying on the sprinkler system piping, the A/C ducts and electrical conduit in the overhead.

Then fighting off the fire department guys that insisted that they were going to run a pipe into the room for sprinklers.

3034. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 15:54:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <72v0k05ngk1l2qtno6tqkmahr8fnlgf0of@4ax.com>
Source record: 89755

On Thu, 09 Sep 2004 13:11:02 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>VSWR
>reading for my antenna is 1.25:1 at the resonant frequency of my antenna.
>Given the inaccuracies of SWR meters I figure I have a ground resistance
>some where between 3 and 10 ohms.

Hi Jimmie,

How do you figure that?

73's
Richard Clark, KB7QHC

3035. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 16:13:22 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <qcv0k09ni33eo9tu17omoca3sl7nrh5b79@4ax.com>
Source record: 89756

On Thu, 09 Sep 2004 08:41:17 -0700, Wes Stewart <n7ws_@_yahoo.com>
wrote:

>On Thu, 09 Sep 2004 15:10:28 GMT, Gary S. <Idontwantspam@net> wrote:
>[snip]
>|In industrial situations, I have had to deal with ground loop
>|problems, which are a PITA to find. Do your grounding correctly, and
>|you will be safer, and have an easier time of it.
>
>You should have seen the problems I had when I had the house
>electricians wiring up an r-f shielded room. Trying to convince them
>that they had to run just *one* ground wire from a single point on the
>room to a building ground and not the service entrance ground *and*
>that the wire couldn't be bare and laying on the sprinkler system
>piping, the A/C ducts and electrical conduit in the overhead.
>
>Then fighting off the fire department guys that insisted that they
>were going to run a pipe into the room for sprinklers.

Most licensed electricians (in theory all of them, but I'll leave
that) have a good understanding of issues related to DC and 60 Hz AC,
voltages up to 480, currents up to 100 A.

Once you get to higher frequencies, including RF, or to serious
voltages or currents, the number of people who really understand drops
off rather quickly, unfortunately as the potential problems and
dangers increase.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

3036. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 16:49:31 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <f501k09kis96js404o3c4he41b74senhbu@4ax.com>
Source record: 89757

On Mon, 6 Sep 2004 23:49:42 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>snip

>Although I may jokingly profess ignorance of American electrical measuring
>instruments, for several years I was the Government-approved Head of
>Laboratory of a measurement standards laboratory of second echelon to the
>British National Physical Laboratory. I was familiar with the excellent
>qualities of HP, GR, Fluke and similar instruments. I played an original
>part in the conversion of the assessment of National worst-case measurement
>uncertainties to statistical uncertainty asssment. But I don't brag about
>it.
>----
>Reg, G4FGQ

Well, Reg, your joking concerning the measuring instruments misled me. Sorry about that. But I don't call your leveling with us on your experience and accomplishments bragging. The more we know about our friends on line the greater the enhancement of our communication, even the humor will be more appreciated. I know that I'll have more appreciation of Punchinello than before.

Now, from a previous post of yours:

>Really Walt, the introduction of God and the royal family to your conjugal
>match philosophy is a little far-fetched. I never suspected it but what
>brand of Bourbon are you on tonight? I recognise the symptoms.
>
>(Funny smiley)
>----
>Reg.

Yeah, Reg, I must have been on something pretty strong when I said that, but I can't remember what it was.

Another subject.: I'm wondering if I have your correct email address. During the past two years, or more, I've sent you several emails with no response. Yet you respond to my posts on this rraa in a cordial and friendly manner. In one of my emails I asked if I had said something that offended you so that I could apologize, but no response. During a cruise on the North and Baltic Seas two years ago I was in London at both the beginning and end of the cruise. I emailed you twice while in London and three times from the ship, asking for your phone number so I talk with you to learn how to find you for a visit.

I first used the address you show on your posts with the 'zzz', but it came back--wrong address. I then used your address without the 'zzz' with no response. Can you help me understand what went wrong, because I really wanted to

meet you while in England.

Walt

3037. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 16:55:32 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <3f21k0dofti9vantf3c70q3i4taoh5b3c2@4ax.com>
Source record: 89758

On Wed, 8 Sep 2004 23:17:56 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Well written explanation. Maybe next year? My 5 year old granddaughter,
>a student in Queen`s College, enjoyed the Hyde Park Lido, so the outing
>was rewarding anyway.
>
>Best regards, Richard Harrison, KB5WZI

Richard, I had finished my first college semester while still 16, but your 5-year old granddaughter a student in Queen's College? From your genes? Were you a PhD at ten or twelve? Holy Gee Whiz!

Walt

3038. Re: SWR meter vs TLI

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 17:01:33 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <5031k0pmivt4v17qeqo8v64divthoam25f@4ax.com>
Source record: 89759

On Thu, 09 Sep 2004 05:47:51 GMT, Richard Clark <kb7qhc@comcast.net> wrote:

>On Wed, 8 Sep 2004 23:17:56 -0500, richardharrison@webtv.net (Richard
>Harrison) wrote:
>
>>Reg wrote:
>>"Really Walt, the introduction of God and the royal family to your
>>conjugal match philosophy is a little far-fetched."
>>
>>They like to be on the right side too, but sometimes even the royals are
>>wrong.
>
>Perhaps Reggie is more a fan of the Sex Pistols:
> "God save the Queen
> the fascist regime,
> they made you a moron
> a potential H-bomb."
>(my regrets to G&S)

Apparently the only G&S the Pistols knew about was 'Pirates'.

3039. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 17:04:08 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <5631k0datatlmh6rql2q09ltdcvs2aref8@4ax.com>
Source record: 89760

On Thu, 09 Sep 2004 08:41:17 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:

>On Thu, 09 Sep 2004 15:10:28 GMT, Gary S. <Idontwantspam@net> wrote:
>[snip]
>|In industrial situations, I have had to deal with ground loop
>|problems, which are a PITA to find. Do your grounding correctly, and
>|you will be safer, and have an easier time of it.
>
>You should have seen the problems I had when I had the house
>electricians wiring up an r-f shielded room. Trying to convince them
>that they had to run just *one* ground wire from a single point on the
>room to a building ground and not the service entrance ground *and*
>that the wire couldn't be bare and laying on the sprinkler system
>piping, the A/C ducts and electrical conduit in the overhead.
>
>Then fighting off the fire department guys that insisted that they
>were going to run a pipe into the room for sprinklers.

Apparently the electricians only knowledge of 'loop' was in 'loophole'.

3040. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 17:19:32 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnck1454.1q7e.bit-bucket@shell.config.com>
Source record: 89761

On Wed, 08 Sep 2004 23:56:20 -0700, Roy Lewallen hath writ:
> The fact that you can extract only half the power from a wave with a
> perfectly efficient antenna is already built into Ae. That is, Ae = P/S,
> where P is the power delivered to a conjugate load and S is the power
> density of the wave.
>
> I suspect that in your reference, Ea is the *peak*, not RMS, field
> strength, and that's why the factor of two.
>
> Incidentally, while you can extract only half the power from a wave with
> a perfectly efficient antenna, it is possible to extract *all* the power
> from a wave. An anechoic chamber extracts essentially all the power from
> waves generated within it.

As well, the universe, in all it's vastness, eventually "...extracts
essentially all the power from waves generated..." by _any_ source. HI!HI!

Jonesy, W3DHJ
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

3041. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 18:41:43 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10k18vb7sv52qff@corp.supernews.com>
Source record: 89762

Jimmie wrote:
>
> Should re read what I write sometimes. I was refering to using the water
> pipe as the sole ground for your electrical system. This used to be a common
> thing and pemissable by the NEC, not sure if it still is.
>

When I replaced my service in 1975, a water pipe ground (which is all my 1952 house had) wasn't sufficient to satisfy the NEC, so I had to add a ground rod. So the NEC hasn't permitted a water pipe ground as the sole ground for at least 29 years. It apparently was permissible in 1952.

Roy Lewallen, W7EL

3042. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 19:42:41 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <Rm20d.2394$9N5.254377@twister.southeast.rr.com>
Source record: 89763

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:72v0k05ngk1l2qtno6tqkmahr8fnlgf0of@4ax.com...
> On Thu, 09 Sep 2004 13:11:02 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >VSWR
> >reading for my antenna is 1.25:1 at the resonant frequency of my antenna.
> >Given the inaccuracies of SWR meters I figure I have a ground resistance
> >some where between 3 and 10 ohms.
>
> Hi Jimmie,
>
> How do you figure that?
>
> 73's
> Richard Clark, KB7QHC

Mostly an educate guess, my AC test blows a 10 amp fuse to smithereens so I figure less than 10. SWR is 1.25 to 1 This equates to about 40 ohms impedance seen at the antenna base. This also agrees with my antenna analyzer. Antenna is a full length 1/4 wl antenna on 20m. I was figuring 37 or soo for this. I know its a lot of by guess and by golly and I am aware that there are better ways of finding out what the ground loss really is but I'm not so anal that I reallly care. Given the SWR reading I figure closer to 3 and a neighbor recently had lightning rods installed and the installers measured theire ground resistance at 2.5 ohms so I am pretty confident of my educated guess .

When I get my tower up 20 meters will be on a beam on top of the tower and I plan to use the ground plane with a 40 M vetical 1/4 wave antenna. Ground plane is made of 12 wires 12ft long connected to a 10 ft ground rod at the base of the antenna. Do you think I should modify the ground plane. I was thinking of at least adding 4 wires 1/4 wl long for 40, I really think this may be a waste of time though. Also would existing ground plane be good for 80M.

3043. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 19:52:31 UTC
From: richardharrison@webtv.net
Message-ID: <11261-4140B47F-230@storefull-3252.bay.webtv.net>
Source record: 89764

Ian, G3SEK wrote:
"The IEEE Dictionary mavens have produced a very HF-cebtric definition of "ground wave"."

Regretable. Seems clear that a ground wave would require interaction with the ground. According to Terman it does. On page 803 of his 1955 edition, Terman says:

"The "ground wave" (also sometimes called surface wave) can exist when the transmitting and receiving antennas are close to the surface of the earth and are vertically polarized. This wave, supported at its lower edge by the presence of the ground, is of practical importance at broadcast and lower frequencies."

The ground wave requires the earth to participate in its propagation and the earth gives the ground wave a continuation beyond the line-of-sight without atmospheric or ionospheric intervention.

Best regards, Richard Harrison, KB5WZI

3044. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 20:16:42 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chqdna$m96$1@sparta.btinternet.com>
Source record: 89765

> So the NEC hasn't permitted a water pipe ground as the sole
> ground for at least 29 years. >
> Roy Lewallen, W7EL
==========

A good thing too. At any time a fully qualified plumber can come along and replace a section of metal water pipe with polyethelene, one of the best insulating materials known to science.

3045. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 21:14:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9oh1k0pqq4pam1opuvr5t1637bt41sf1fm@4ax.com>
Source record: 89766

On Thu, 09 Sep 2004 19:42:41 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>This equates to about 40 ohms
>impedance seen at the antenna base. This also agrees with my antenna
>analyzer. Antenna is a full length 1/4 wl antenna on 20m. I was figuring 37
>or soo for this.

Hi Jimmie,

So you have no radials?

73's
Richard Clark, KB7QHC

3046. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 21:27:52 UTC
From: Dave <noone@nowhere.com>
Message-ID: <R6mdnQnyibt7V93cRVn-rA@crocker.com>
Source record: 89767

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:chqdna$m96$1@sparta.btinternet.com...
> > So the NEC hasn't permitted a water pipe ground as the sole
> > ground for at least 29 years. >
> > Roy Lewallen, W7EL
> ==========
>
> A good thing too. At any time a fully qualified plumber can come along
and
> replace a section of metal water pipe with polyethelene, one of the best
> insulating materials known to science.
>
>

yeah, like they did on mine when they installed a whole house water
filter... fortunately i was watching and didn't let him throw away the handy
ground strap that came with it to jump around the filter.

3047. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 22:16:35 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chqko3$lq9$1@hercules.btinternet.com>
Source record: 89768

I am not very familiar with USA power-grounding regulations and they probably vary from state to state. But I am under the impression that in some simple circumstances, perhaps domestic, a single ground rod is considered adequate for safety purposes.

Under similar circumstances a maximum ground electrode resistance (whatever its construction) of 50 ohms is specified.

A 'standard' ground rod is 8 feet long and 1 inch in diameter.

An average soil resistivity is 500 ohm-metres (= 2 mS). See Eznec?

The calculated resistance of a single standard rod in average soil is 194 ohms. (I'm sure the calculating formula can be found somewhere on the IEEE shelves. There ought to be greater use made of it.)

Now I don't expect the alarm bells to be rung from Washington to LA. But isn't there a serious inconsistency somewhere?

As a matter of interest, the resistances to ground of 2, 3 and 4 rods in parallel, spaced 6 feet apart in average soil, are as follows -

2 Rods = 113 ohms
3 Rods = 86 ohms
4 Rods = 70 ohms

all of which exceed the specified maximum of 50 ohms.

Quite a low average soil resistivity of about 130 ohms is needed to bring 50 percent of installations within specification.

If my starting data is wildly adrift then disregard my waffle.

Reg, G4FGQ

3048. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 22:32:49 UTC
From: Dave <noone@nowhere.com>
Message-ID: <xqOdndTr762BR93cRVn-vA@crocker.com>
Source record: 89769

yeah, and its worse than that. most times they only use 1/2" or 5/8"
diameter rods, and the 6' spacing becomes 3' 'or so' when they do more than
one, which seems to be getting more common. the last electrician i hired
actually put 2 rods at a separate garage service entrance without being
prompted.... but maybe it was all the towers and other rods around that
convinced him he should do it right before i said anything.

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:chqko3$lq9$1@hercules.btinternet.com...
> I am not very familiar with USA power-grounding regulations and they
> probably vary from state to state. But I am under the impression that in
> some simple circumstances, perhaps domestic, a single ground rod is
> considered adequate for safety purposes.
>
> Under similar circumstances a maximum ground electrode resistance (
whatever
> its construction) of 50 ohms is specified.
>
> A 'standard' ground rod is 8 feet long and 1 inch in diameter.
>
> An average soil resistivity is 500 ohm-metres (= 2 mS). See Eznec?
>
> The calculated resistance of a single standard rod in average soil is 194
> ohms. (I'm sure the calculating formula can be found somewhere on the
IEEE
> shelves. There ought to be greater use made of it.)
>
> Now I don't expect the alarm bells to be rung from Washington to LA. But
> isn't there a serious inconsistency somewhere?
>
> As a matter of interest, the resistances to ground of 2, 3 and 4 rods in
> parallel, spaced 6 feet apart in average soil, are as follows -
>
> 2 Rods = 113 ohms
> 3 Rods = 86 ohms
> 4 Rods = 70 ohms
>
> all of which exceed the specified maximum of 50 ohms.
>
> Quite a low average soil resistivity of about 130 ohms is needed to bring
50
> percent of installations within specification.
>
> If my starting data is wildly adrift then disregard my waffle.

> ----
> Reg, G4FGQ
>
>
>

3049. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 23:01:31 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <fh50d.17732$nP5.5889@newssvr27.news.prodigy.com>
Source record: 89770

Roy Lewallen wrote:
> Jimmie wrote:
>
>>
>> Should re read what I write sometimes. I was refering to using the water
>> pipe as the sole ground for your electrical system. This used to be a
>> common
>> thing and pemissable by the NEC, not sure if it still is.
>>
>
> When I replaced my service in 1975, a water pipe ground (which is all my
> 1952 house had) wasn't sufficient to satisfy the NEC, so I had to add a
> ground rod. So the NEC hasn't permitted a water pipe ground as the sole
> ground for at least 29 years. It apparently was permissible in 1952.
>
> Roy Lewallen, W7EL

And I had a friend, had home in Springfield Or., was built during the WAR!
Home was plummed with (If you can believe this) Electrical Conduit! Apparently,
because of the shortage of materials, this met code then! Stuff finally rotted
out, around 1971-- remember him useing his vacation to replum the house!
And I had one , in K.Falls, OR was built as old farm house, with steel pipe,
that started leaking- electrolysis was rapidly eating it- replaced with Copper.
Was curious about the UNIONS used on it-- turns out that those are INSULATED JOINTS!
Plumber said had Copper pipes eating out in as little as 3-5 years, before they were
available, with them expected 25-30 years, before the pipe gives out! As running
current thru a pipe with an insulated connection is worthless as a ground, and even
current flowing thru a copper pipe, is hazardious to its health, don't think would
recommend this tactic if you want a good ground. Jim NN7K

3050. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 23:05:49 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <ml50d.17720$aW5.7105@fed1read07>
Source record: 89671

With linear loading, you can get up a lot of wire in a small space. Take a look at
http://hamgate.sunyerie.edu/~larc/super_linear_-_loaded_inverted_v.htm for an example of a 160 meter inverted vee in a 40 foot yard!

If you want multi band operation, put up as much wire as you can and feed it with ladder line to a 1:1 balun to a short piece of coax to a tuner.

Feed it at the top so the maximum current is up high.

If an inverted L works for your lot, try feeding it at the top middle instead of the bottom end and using the linear loading technique to make each leg longer. According to Cebik if you can get 3/8s wavelength, you are very close to the full performance of a half wave. Feeding at the top middle does not require a radial field to work.
--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

"Jack Painter" <223bthp@cox.net> wrote in message
news:j0P%c.174706$Lj.167623@fed1read03...
> Thanks Craig - and if you could, please elaborate on these design
> considerations:
>
> The antenna is not erected yet - still planning. I would choose a 1:1
> balun
> if I used one at all with an end-fed inverted-L configuration. But if I
> configure the antenna as a sloper (same L-shape) and top-feed at the angle
> point, then I thought a 4:1 balun could help make 2182khz tunable on an
> antenna with dipole properties that is really too short (would have to be
> 107' each leg not 107' total, which is about all I can get at that
> location). Of those two choices, I had not intended to use ladderline for
> either, but would consider it if some benefit was possible. Ideally, the
> antenna would be desireable to cover 2-20mhz. No compromse on the 2182 end
> is worth the upper bandwidth though, with 5.7 & 8.9 mhz the other
> requirements that should not unduly strain a tuner under high tx power.
> The
> antenna would be primarily for 2182 - 4125 khz.. Thanks for any help.
>
> Jack
>
> "Craig Buck" <k4ia@cox.net> wrote in message
> news:Y6O%c.7112$OZ6.5222@okepread06...

>> You can go with ladder line right out of the tuner or to a short piece of
>> coax to a balun, then to ladder line. I have about ten feet of coax to a
>> 1:1 balun outside. The coax is easier to get out of the house and away
> from
>> things that might unbalance the ladder line. Loss on such a short piece
> of
>> coax is negligible even at high SWRs on HF.
>>
>> Whether you use a 4:1 or 1:1 depends on the antenna and feedline. I use
>> a
>> 1:1. Your antenna will be the "right" length so the impedance at the
>> transmitter end won't be too far off from 70 ohms. A 4:1 balun would be
>> a
>> mistake as it would lower the impedance making it harder to match the
>> transmitter.
>>
>> I have to ask, "Why are you using ladder line?" Usually it is only used
>> when the antenna has a high SWR and we want to avoid losses in the coax.
>> You won't have much of a mismatch, if any. I would think you would go
> with
>> coax, you might not even need a tuner.
>> --
>> Radio K4ia
>> Craig "Buck"
>> Fredericksburg, VA USA
>> FISTS 6702 cc 788 Diamond 64
>>
>>
>> "Jack Painter" <223bthp@cox.net> wrote in message
>> news:UuM%c.173651$Lj.145677@fed1read03...
>> >
>> > "Craig Buck" <k4ia@cox.net> wrote
>> >
>> > > I use a top center fed L. One side is horizontal and the other side
> is
>> >> vertical. Fed at the top center with ladder line. Cebik has several
>> >> articles on his site about center fed Ls. No ground plane, horizontal
>> >> and
>> >> vertical polarization, fewer nulls in the pattern. Very nice
>> >>
>> >> I think the center feds make a lot more sense for multiband operation.
>> >>
>> >> --
>> >> Radio K4ia
>> >> Craig "Buck"
>> >> Fredericksburg, VA USA
>> >> FISTS 6702 cc 788 Diamond 64
>> >
>> > Hi Craig, is that fed with ladder line right out of the tuner? I'm
> hoping

>> > there is a best-fit arangement from my tuner to an inverted-L with
> either
>> > a
>> > top-fed through a 4:1 balun or end-fed without a balun. In either case
> the
>> > intention is to cover 2182khz with a 107' 1/4~ L. Any suggestions on
> the
>> > best arrangement for that work?
>> >
>> > Thanks,
>> >
>> > Jack
>> > Virginia Beach VA
>> >
>> >
>>
>>
>
>

3051. Re: Morse code teacher

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-09 23:17:26 UTC
From: Warren Bowery <kc8ykq@arrl.net>
Message-ID: <Xns955FC43AAB016wboweryb rightnet@216.196.97.142>
Source record: 89672

I wholeheartedly agree with Mr. Meister. I used Kcoh CW Trainer to learn Morse and it was very easy. Best of all, it's free!

Warren - KC8YKQ

Wolfgang K. Meister <no.mail@please.com> wrote in news:ltlbj0t48o27o7mjr2om31bph6um181nac@4ax.com:

> Sarah,
>
> have a look at http://www.qsl.net/g4fon/ , there is the 'Koch'
> trainer. One of the best ways to learn CW.
>
> The software is freeware.
>
> 73s
> Wolfgang
> OE1MWW
>
>

3052. Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 01:00:27 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86zn3zsztg.fsf@duchess.twilley.org>
Source record: 89673

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

My yard is adjacent to a large park. The park's border with yards
like mine consists of a chain link fence that's in excess of one
thousand feet in length. The vegetation is such that I could run a
long wire about a foot over the top of the fence for a large part of
that thousand feet. Would the chain link fence cause negative
interactions? Would this be a receive-only antenna and not any good
for transmitting? I'd connect it to the random wire lug on my MFJ
Versa Tuner II to match it to my Kenwood tube rig.

Thoughts? Comments? Suggestions?

Jack.
(I'm going to try it regardless for receiving, but what should I expect?)
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.5 (FreeBSD)

iD8DBQFBQPywGPFSfAB/ezgRAt+PAJ9GsIO0aHvMvOEOE9bESpf44lFWwwCfeTBs
feiNwnBJMkGUBfR0hZ5yyDc=
=r05z
-----END PGP SIGNATURE-----
```

3053. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 02:40:00 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <pj32k0tvm0qb78hhg33g3dakbrt5op8pn9@4ax.com>
Source record: 89674

On Thu, 09 Sep 2004 17:04:08 GMT, Walter Maxwell <w2du@iag.net> wrote:

|On Thu, 09 Sep 2004 08:41:17 -0700, Wes Stewart <n7ws_@_yahoo.com> wrote:
|
|>On Thu, 09 Sep 2004 15:10:28 GMT, Gary S. <Idontwantspam@net> wrote:
|>[snip]
|>|In industrial situations, I have had to deal with ground loop
|>|problems, which are a PITA to find. Do your grounding correctly, and
|>|you will be safer, and have an easier time of it.
|>
|>You should have seen the problems I had when I had the house
|>electricians wiring up an r-f shielded room. Trying to convince them
|>that they had to run just *one* ground wire from a single point on the
|>room to a building ground and not the service entrance ground *and*
|>that the wire couldn't be bare and laying on the sprinkler system
|>piping, the A/C ducts and electrical conduit in the overhead.
|>
|>Then fighting off the fire department guys that insisted that they
|>were going to run a pipe into the room for sprinklers.
|
|Apparently the electricians only knowledge of 'loop' was in 'loophole'.

Yep. To elaborate. The building (100,000 sq ft) was constructed of tip-up concrete exterior walls and steel columns and roof trusses. A few of the columns, were dedicated ground points, complete with copper plates for wire attachement. They were bonded to the steel rebar grid in the concrete slab-on-grade floor.

All of the A/C conductors into the room, neutral included, ran through some real hefty line filters that were on the outside of the room with feedthrus into a distribution box inside. On top of the room was a single copper stud for ground connection.

As I said earlier, the electricians wanted to ground the room with the usual A/C distribution safety ground wire. When I said no, they needed to go to the nearest column ground, they ran a 6 AWG bare copper wire to the grounding plate. Of course the wire was in contact with everything it contacted.

So when I saw this I said no, you have to run an insulated wire. So the next iteration was a single green wire. I said no, some bozo plumber (I shouldn't say this, my brother's a plumber) or HVAC guy will be up there working and the wire will be in the way and they'll cut it and my room with be a 100 or so V above ground due to all of the capacitors in the filters. I finally got my insulated wire in conduit.

Then the HVAC guys wanted to run a steel duct to the room. Noooo, use an insulated collar and give me a pneumatic thermostat.

Then as mentioned earlier, it was the fire department. They saw all of the handy pipes running through my feedthru panel (actually waveguide below cutoff feedthrus) and said we can just plumb in the water through one of these. Nooo, can't have a metallic connection. So they say, they can use a dielectric union. Nooo, the water in those pipes hasn't moved in 20 years and is primarily rust.

When they started talking about halon I said that my widow was going to have a real good time with the millions she would get from the lawsuit. They decided that the regular sprinkler system above the shielded room was okay afterall.

3054. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 02:43:00 UTC
From: Graybyrd <me@privacy.net>
Message-ID: <me-FED392.20430009092004@corp-radius.supernews.com>
Source record: 89675

In article <ml50d.17720$aW5.7105@fed1read07>,
"Craig Buck" <k4ia@cox.net> wrote:

> With linear loading, you can get up a lot of wire in a small space. Take a
> look at
> http://hamgate.sunyerie.edu/~larc/super_linear_-_loaded_inverted_v.htm for
> an example of a 160 meter inverted vee in a 40 foot yard!
>
> If you want multi band operation, put up as much wire as you can and feed it
> with ladder line to a 1:1 balun to a short piece of coax to a tuner.
>
> Feed it at the top so the maximum current is up high.
>
> If an inverted L works for your lot, try feeding it at the top middle
> instead of the bottom end and using the linear loading technique to make
> each leg longer. According to Cebik if you can get 3/8s wavelength, you are
> very close to the full performance of a half wave. Feeding at the top
> middle does not require a radial field to work.
> --
> Radio K4ia
> Craig "Buck"
> Fredericksburg, VA USA
> FISTS 6702 cc 788 Diamond 64
[snip]

Some nice suggestions, there, especially the point about keeping the
maximum current area of the antenna as high as possible.

The antenna can be end-fed (high impedance), off-center fed (moderate
impedance) and center-fed (low impedance). With a good antenna tuner, I
don't s'pose it much matters about impedance, as long as the varying
amounts fall within the tuner's range.

It was a revelation to me to realize that a half-wave length of wire
doesn't really care where it is fed: end, off-center, or mid-point. The
high-current portion will be in the middle and the high-voltage points
will be at the ends, regardless of where the feed point is located, as
long as the wire is resonant at the operating frequency.

Linear loading is effective, but as more wire is tightly folded back
from the ends, the more narrow the 'bandwidth' becomes, limiting the
tuneable range. This would also pretty much kill the multi-band utility
of the antenna.

I use a 130-foot ladderline fed dipole, center-fed. In a location like
yours, I'd keep as much of the center portion of the antenna as high and

level as possible, and then at each far end I'd fold them down and to the side, and then back along the fence toward to the center as far as needed, clipping the wire to stand-off insulators and keeping them up out of reach of curious fingers. The radiation from the end portions is less, and is a practical compromise for 80 meters and up.

For 160 meter operation, I use "clip on" extensions that run along my perimeter fence on both sides, and they make a sort of "Z" in respect to the main antenna. This works very well, letting the center part of the dipole radiate up high, while providing enough physical wavelength to allow tuning.

All of this is a compromise, of course, but it's practical and effective.

I suspect that the performance of the "all band" antenna is somewhat less effective on 20 meters up .. but this is a much more approachable situation. I've acquired an end-fed trapped half-wave vertical for 20 thru 10 meters that is only 17 feet in length. I plan to mount it on a mast alongside the house. I suspect that the radiation pattern on 20 meters and up from this "vertical halfwave" will be much more evenly distributed and predictable than the multi-node variations of the tuneable dipole. Between the two antennas, one should be pretty well covered, given the space restrictions.

Gray K7VGW

--
Reply to: allen/at/graybyrd/dot/com

"Those who figure that freedom is maintained by putting a .50 caliber slug through anyone and everyone who disagrees with their flag-waving, chest-beating histrionic rants of patriotism will probably live to see the end of their own freedoms while hiding behind their locked and shuttered doors, sucking the barrel of their own shotgun." --me

3055. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 03:25:06 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <n890d.31528$Ka6.3203@okepread03>
Source record: 89676

"Graybyrd" <me@privacy.net> wrote
> "Craig Buck" <k4ia@cox.net> wrote:
>
> > With linear loading, you can get up a lot of wire in a small space.
Take a
> > look at
> > http://hamgate.sunyerie.edu/~larc/super_linear_-_loaded_inverted_v.htm
for
> > an example of a 160 meter inverted vee in a 40 foot yard!
> >
> > If you want multi band operation, put up as much wire as you can and
feed it
> > with ladder line to a 1:1 balun to a short piece of coax to a tuner.
> >
> > Feed it at the top so the maximum current is up high.
> >
> > If an inverted L works for your lot, try feeding it at the top middle
> > instead of the bottom end and using the linear loading technique to make
> > each leg longer. According to Cebik if you can get 3/8s wavelength, you
are
> > very close to the full performance of a half wave. Feeding at the top
> > middle does not require a radial field to work.
> > --
> > Radio K4ia
> > Craig "Buck"
> > Fredericksburg, VA USA
> > FISTS 6702 cc 788 Diamond 64
> [snip]
>
> Some nice suggestions, there, especially the point about keeping the
> maximum current area of the antenna as high as possible.
>
> The antenna can be end-fed (high impedance), off-center fed (moderate
> impedance) and center-fed (low impedance). With a good antenna tuner, I
> don't s'pose it much matters about impedance, as long as the varying
> amounts fall within the tuner's range.
>
> It was a revelation to me to realize that a half-wave length of wire
> doesn't really care where it is fed: end, off-center, or mid-point. The
> high-current portion will be in the middle and the high-voltage points
> will be at the ends, regardless of where the feed point is located, as
> long as the wire is resonant at the operating frequency.
>
> Linear loading is effective, but as more wire is tightly folded back

> from the ends, the more narrow the 'bandwidth' becomes, limiting the
> tuneable range. This would also pretty much kill the multi-band utility
> of the antenna.
>
> I use a 130-foot ladderline fed dipole, center-fed. In a location like
> yours, I'd keep as much of the center portion of the antenna as high and
> level as possible, and then at each far end I'd fold them down and to
> the side, and then back along the fence toward to the center as far as
> needed, clipping the wire to stand-off insulators and keeping them up
> out of reach of curious fingers. The radiation from the end portions is
> less, and is a practical compromise for 80 meters and up.
>
> For 160 meter operation, I use "clip on" extensions that run along my
> perimeter fence on both sides, and they make a sort of "Z" in respect to
> the main antenna. This works very well, letting the center part of the
> dipole radiate up high, while providing enough physical wavelength to
> allow tuning.
>
> All of this is a compromise, of course, but it's practical and effective.
>
> I suspect that the performance of the "all band" antenna is somewhat
> less effective on 20 meters up .. but this is a much more approachable
> situation. I've acquired an end-fed trapped half-wave vertical for 20
> thru 10 meters that is only 17 feet in length. I plan to mount it on a
> mast alongside the house. I suspect that the radiation pattern on 20
> meters and up from this "vertical halfwave" will be much more evenly
> distributed and predictable than the multi-node variations of the
> tuneable dipole. Between the two antennas, one should be pretty well
> covered, given the space restrictions.
>
> Gray K7VGW
>

Many thanks. I do not have the space for this 4th HF antenna to get 1/2 wavelength of 2.182 mhz (214'). I can manage 1/4~ in the fashion of an inv-L antenna. A big compromise to begin with, but how would that utilize it's desired 1/4~ electrical length if I fed it anyplace but from the end? I can add radials and will have to do so if the end-fed inv-L turns out to be the best by consensus. Earth is sandy with a little clay - not very good. An MFJ-962D manual or MFJ-994 ATU, whichever performs better, and a 1:1 current balun at the feedpoint (if helpful) will be used. Estimated height of the vertical radiator from shield-grounded feedpoint to the "L" would be 37' and the remaining 70' of radiator would be horizontal. Comments on the expected efficiency of this arrangement for best performance on 2182-4125 khz are greatly appreciated. Anyone who is capable of modeling this design, that would be seriously helpful too ;-)

73,

Jack Painter
Virginia Beach VA

3056. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 03:45:44 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Ir90d.31535$Ka6.6409@okepread03>
Source record: 89677

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote

> I am not very familiar with USA power-grounding regulations and they
> probably vary from state to state. But I am under the impression that in
> some simple circumstances, perhaps domestic, a single ground rod is
> considered adequate for safety purposes.
>
> Under similar circumstances a maximum ground electrode resistance (
whatever
> its construction) of 50 ohms is specified.
>
> A 'standard' ground rod is 8 feet long and 1 inch in diameter.
>
> An average soil resistivity is 500 ohm-metres (= 2 mS). See Eznec?
>
> The calculated resistance of a single standard rod in average soil is 194
> ohms. (I'm sure the calculating formula can be found somewhere on the
IEEE
> shelves. There ought to be greater use made of it.)
>
> Now I don't expect the alarm bells to be rung from Washington to LA. But
> isn't there a serious inconsistency somewhere?
>
> As a matter of interest, the resistances to ground of 2, 3 and 4 rods in
> parallel, spaced 6 feet apart in average soil, are as follows -
>
> 2 Rods = 113 ohms
> 3 Rods = 86 ohms
> 4 Rods = 70 ohms
>
> all of which exceed the specified maximum of 50 ohms.
>
> Quite a low average soil resistivity of about 130 ohms is needed to bring
50
> percent of installations within specification.
>
> If my starting data is wildly adrift then disregard my waffle.
> ----
> Reg, G4FGQ
>

Yes Reg, sorry the figures are (thankfully) in error. Especially since 25ohm
is required by our U.S. NEC, and that's easily attained in some soils, not
so easy in others. This is being changed in the 2004 code changes, but it
was paraphrased below:

The NEC does not specify a maximum earth resistance for the grounding electrode system required under Article 250-81. The only place that does specify earth resistance is under Article 250-84, for "made" (rod, pipe, and plate) electrodes. Here the NEC specifies a resistance to ground of 25 Ohms or less for a single electrode. If the electrode does not meet 25 Ohms, it must be supplemented by one additional electrode. However the combination of the two electrodes does not have to meet the 25 ohm requirement!

http://www.cpccorp.com/deep.htm

Neither should anyone be overly concerned with acheiving low DC-resistivity of a grounded electrode. In spite of some interesting comments about their perceived successes in the white paper I cited above, the grounding issue is usually overstated - the ground for lightning is the real issue, as any 10' 5/8" copper rod earth ground works for 60hz electrical safety. For safe termination of lightning downconductors and mast grounds etc, the best ground you can reasonably achieve is going to be enough - as long as the principles of bonding are adhered to religiously. That means as close to equipotential as possible, and it does not assume a good ground, or even any ground at all in certain cases. We surely want the best ground reasonably attainable, and if you can sink 30' of connected rods, great. If you sink a few 8-foot 5/8" or a couple of 1"x10', even better. See the data in that paper above for some sample resistance measurements which they consider "average" (ha - Richard Clark's laughing ;-), rightfully so.

Best regards,

Jack

3057. 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 03:50:44 UTC
From: A-Tech <atech@austin.rr.com>
Message-ID: <ow90d.7798$le.1852@fe2.texas.rr.com>
Source record: 89678

Hi,

I am a newbie here and have just dropped in to ask a single technical question.

Living as I do in a suburban area, I use an FM antenna to draw the stations located in
a certain vector from me. A station of interest is located at 107.1MHz but is interfered with by an off-axis stronger signal at 106.9MHz

The FM antenna has a "standard" 300ohm screw connection for the lead-in (to which I connect
a 300/75 xfmr and use coax down).

I would appreciate anyone's help in designing and implementing a notch filter that would suck
out a major part of the interfering energy.

It seemed to me that a reasonable attempt would be to use a piece of 300ohm flat-lead and short
it at an appropriate distance from the screw-terminals of the antenna. None of my attempts have
yielded any observable improvements. It may be that the filter must be "deeper" (higher Q?) than
what my attempts provide.

Any ideas?

Thank you.

...Bryce

3058. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 04:11:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pl92k09ga38ir245g18ad086a09hm2f519@4ax.com>
Source record: 89679

On Fri, 10 Sep 2004 03:50:44 GMT, "A-Tech" <atech@austin.rr.com>
wrote:

>It seemed to me that a reasonable attempt would be to use a piece of 300ohm
>flat-lead and short
>it at an appropriate distance from the screw-terminals of the antenna. None
>of my attempts have
>yielded any observable improvements. It may be that the filter must be
>"deeper" (higher Q?) than
>what my attempts provide.
>
>Any ideas?

Hi Bryce,

Length can be very critical as you can imagine. Trying to find the
sweet spot, over and over, can become taxing if not simply fruitless
(undoubtedly your experience to this point).

A simple method is to connect the twin lead in the usual manner.
Measure out a little more than 1.5M to work with (this will be too
long, but it is better than being too short). Take a razor blade (old
style used for scraping paint) and working from the far end cut
through the insulation of both leads at once to short them out.
Repeat at 1/16" intervals (or 1mm intervals if we are sticking with
metric) and note results. You don't want to cut through completely,
just enough to nick the copper and make a good short with the blade.

Keep in mind that while you are handling the line doing this, you are
part of the tuned circuit (and possibly detuned circuit too). It will
give you a quick ball-park and reduce the cut-and-try.

73's
Richard Clark, KB7QHC

3059. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 04:20:10 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <_X90d.8722$Va5.8116@trnddc01>
Source record: 89680

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:pl92k09ga38ir245g18ad086a09hm2f519@4ax.com...
> On Fri, 10 Sep 2004 03:50:44 GMT, "A-Tech" <atech@austin.rr.com>
> wrote:
>
> >It seemed to me that a reasonable attempt would be to use a piece of
300ohm
> >flat-lead and short
> >it at an appropriate distance from the screw-terminals of the antenna.
None
> >of my attempts have
> >yielded any observable improvements. It may be that the filter must be
> >"deeper" (higher Q?) than
> >what my attempts provide.
> >
> >Any ideas?
>
> Hi Bryce,
>
> Length can be very critical as you can imagine. Trying to find the
> sweet spot, over and over, can become taxing if not simply fruitless
> (undoubtedly your experience to this point).
>
> A simple method is to connect the twin lead in the usual manner.
> Measure out a little more than 1.5M to work with (this will be too
> long, but it is better than being too short). Take a razor blade (old
> style used for scraping paint) and working from the far end cut
> through the insulation of both leads at once to short them out.
> Repeat at 1/16" intervals (or 1mm intervals if we are sticking with
> metric) and note results. You don't want to cut through completely,
> just enough to nick the copper and make a good short with the blade.
>
> Keep in mind that while you are handling the line doing this, you are
> part of the tuned circuit (and possibly detuned circuit too). It will
> give you a quick ball-park and reduce the cut-and-try.
>
> 73's
> Richard Clark, KB7QHC

Unfortunately, you will find that the -3dB BW of a single stub is in the
neighborhood of 5% or >5MHz at your frequency of interest. The
discrimination between your desired and undsired channels will be
negligible.
We manufacture a line of small multiple cavity symmetrical and asymmetrical

notch filters- getting under 0.5% BW with small topology filters is nearly impossible at VHF.

Dale W4OP

3060. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 05:27:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <njd2k05qmn4vec0qk8g9kh1q1ta8rkmej1@4ax.com>
Source record: 89681

On Thu, 9 Sep 2004 23:45:44 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>http://www.cpccorp.com/deep.htm

> See the data in that
>paper above for some sample resistance measurements which they consider
>"average"

Hi Jack,

Interesting link.

The paper offered was a model of terse reporting, sticking only with
the facts as best they could come by them, and little in the way of
overextending themselves with fanciful interpretations. The averages
were what they found for themselves, not abstracted and generalized to
the world at large.

I would suggest that they also made some cogent observations about the
soil structure that goes beyond myths and software passing as the new
age equivalent of old wive's tales. I would further observe that
making a declaration of what the resistance of ONE electrode is, is
farcical in the extreme. It would take two to tango and with that
second one added to measure the first, problems abound!

Especially notable is the 10 fold variation in reported electrode
resistance over a 4 year period, and the 10 fold variation of
electrode resistance within a survey group. Such an error range
easily eclipses what is taken on faith as "average ground." And then
we have to ask ourselves that embarrassing question, just how does the
mud in my backyard compare to "average?"

Your comments on
>That means as close to
>equipotential as possible, and it does not assume a good ground, or even any
>ground at all in certain cases.
translate with fungible results to RF for the same reason. No one
here knows what quality ground they live over (really! to one skin
depth at HF?).

I would still like to know how many radials Reggie needs for his
several KOhm mud in his garden. No, I take that back, what I want to
know is what parameters he puts into the software that predicts the
number of radials - and why would it matter?

73's
Richard Clark, KB7QHC

3061. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 05:33:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10k2f5o9e9ubscb@corp.supernews.com>
Source record: 89682

I agree with Dale that you're not going to get anywhere near sharp enough a filter by making something out of twinlead. Since the signals are coming from different directions, it might be more practical to make a null in the antenna pattern in the direction of the interfering signal. This is most likely to work if the desired station is reasonably strong, so it doesn't have to be in the direction of the antenna's maximum response. A two element phased array can be designed to achieve a deep and fairly narrow null, and you get a deep null off the end of a very symmetrical dipole or the side of a Yagi. If the directions are fairly close, an antenna with wider beam, like a 2-element phased cardiod pattern array or a dipole, would give you more of the desired signal when the undesired one is in the null, than a Yagi would.

You might have to use some sort of feedline decoupling (common mode choke, also known as a "current" or "choke" balun) to prevent the feedline from being part of the antenna and reducing the depth of the pattern null.

Roy Lewallen, W7EL

3062. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 11:24:23 UTC
From: Dave <noone@nowhere.com>
Message-ID: <kIWdnezasuJ1E9zcRVn-tQ@crocker.com>
Source record: 89683

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:njd2k05qmn4vec0qk8g9kh1q1ta8rkmej1@4ax.com...
> On Thu, 9 Sep 2004 23:45:44 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >http://www.cpccorp.com/deep.htm
>
> > See the data in that
> >paper above for some sample resistance measurements which they consider
> >"average"
>
> Hi Jack,
>
> Interesting link.
>
> The paper offered was a model of terse reporting, sticking only with
> the facts as best they could come by them, and little in the way of
> overextending themselves with fanciful interpretations. The averages
> were what they found for themselves, not abstracted and generalized to
> the world at large.
>
> I would suggest that they also made some cogent observations about the
> soil structure that goes beyond myths and software passing as the new
> age equivalent of old wive's tales. I would further observe that
> making a declaration of what the resistance of ONE electrode is, is
> farcical in the extreme. It would take two to tango and with that
> second one added to measure the first, problems abound!
>
> Especially notable is the 10 fold variation in reported electrode
> resistance over a 4 year period, and the 10 fold variation of
> electrode resistance within a survey group. Such an error range
> easily eclipses what is taken on faith as "average ground." And then
> we have to ask ourselves that embarrassing question, just how does the
> mud in my backyard compare to "average?"
>
> Your comments on
> >That means as close to
> >equipotential as possible, and it does not assume a good ground, or even
any
> >ground at all in certain cases.
> translate with fungible results to RF for the same reason. No one
> here knows what quality ground they live over (really! to one skin
> depth at HF?).
>

> I would still like to know how many radials Reggie needs for his
> several KOhm mud in his garden. No, I take that back, what I want to
> know is what parameters he puts into the software that predicts the
> number of radials - and why would it matter?
>
they 'why' is the real question as there are several reasons to design a 'ground' and each of them has different requirements. a few examples with different needs:
1. home electrical safety ground.
2. electrical substation ground.
3. hv transmission line ground for step or touch potential.
4. hv transmission line ground for lightning protection.
5. building ground for lightning protection.
6. building ground for rf isolation
7. vertical antenna ground for rf return
these are all very different problems requiring very different solutions. i write software, part of which helps design grounds for hv transmission line structures. the theory and practice in this area is quite different from that used to design any of the other types (except maybe for small buildings requiring lightning protection). And some of the extensive testing we have done on the physics of the problem shows that the ground reacts quite differently from what most people expect when trying to dissipate lightning transients. i wouldn't use my software to design a ground for my station, though i did use some of the results of our tests to convince myself that what i did do would be adequate. Nor would i take any one other program as gospel when designing a ground for any particular type of installation. indeed at my station i have several different types of 'ground' systems, raised radials under elevated verticals, wire mesh mats on the ground under elevated verticals, ground rods at towers and service entrances, ufer grounds in foundations, perimeter ground around the house, each for a slightly different purpose and no one good enough for all the jobs that need to be done. Some help with rf radiation from antennas, some are lightning protection, and some are for ac safety. and they can't be interchanged in most cases... and some of them would not fit most layman's definition of what a 'ground' even is.

3063. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 11:27:03 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MI6dnduEcbUVEtzcRVn-uA@crocker.com>
Source record: 89684

i would also expect it to be rather poor for transmitting though it might make a decent low band receiving antenna similar to a Beverage or wave antenna. its one of those situations where i would recommend that you 'plug it in and try it', you might be surprised at how well it works, or you might have trouble getting around the block.

"Jack Twilley" <jmt+usenet@twilley.org> wrote in message news:86zn3zsztg.fsf@duchess.twilley.org...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> My yard is adjacent to a large park. The park's border with yards
> like mine consists of a chain link fence that's in excess of one
> thousand feet in length. The vegetation is such that I could run a
> long wire about a foot over the top of the fence for a large part of
> that thousand feet. Would the chain link fence cause negative
> interactions? Would this be a receive-only antenna and not any good
> for transmitting? I'd connect it to the random wire lug on my MFJ
> Versa Tuner II to match it to my Kenwood tube rig.
>
> Thoughts? Comments? Suggestions?
>
> Jack.
> (I'm going to try it regardless for receiving, but what should I expect?)
> - --
> Jack Twilley
> jmt at twilley dot org
> http colon slash slash www dot twilley dot org slash tilde jmt slash
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.2.5 (FreeBSD)
>
> iD8DBQFBQPywGPFSfAB/ezgRAt+PAJ9GsIO0aHvMvOEOE9bESpf44lFWwwCfeTBs
> feiNwnBJMkGUBfR0hZ5yyDc=
> =r05z
> -----END PGP SIGNATURE-----

3064. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 11:50:22 UTC
From: Bob <nowhere@nospam.org>
Message-ID: <Txg0d.42218$Nd6.1202543@news20.bellglobal.com>
Source record: 89685

You could also put the filter not at the antenna, but back on the lead in just before the receiver. That way any 106.9 being pick up in the feed line are also attenuated.

Have you tried calling the 106.9 station? Years back, many stations freely (or very cheaply) provided filters to people experiencing interference from their signal. I remember back in 1987 I had a customer whose Muzak SCA reception was being trashed from a nearby broadcaster. I was expecting to pay for a filter, but the station engineer literally left one at their reception desk for pickup.

I would not expect free, but you could hope for inexpensive. Never hurts to call.

Good luck,
B.

3065. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 12:15:46 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41419c81_6@corp.newsgroups.com>
Source record: 89686

Jack Painter wrote:
> ... then I thought a 4:1 balun could help make 2182khz tunable on an
> antenna with dipole properties that is really too short (would have to be
> 107' each leg not 107' total, which is about all I can get at that
> location).

A "too short" dipole has a feedpoint resistance lower than 50 ohms.
Why would one use a 4:1 balun to attempt to divide that already too
low resistance by 4?
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3066. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 12:24:40 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <j2h0d.10938$OZ6.1090@okepread06>
Source record: 89687

Two big advantages of the center top feed as opposed to bottom end feed is center top requires no radials. Bottom L will need a minimum of 8 100 foot radials in your application and some would argue you need many more than 8. Have fun burying 800+ feet of wire. Second, top feed gets the high current radiating part of the antenna up higher. Check out http://www.cebik.com/ltv.html and his discussion of ladder line at http://www.cebik.com/gup/gup32.html. He concludes a 1:1 balun is best.

If you have 37 feet of height you can feed at the top and run the wire straight down, back up and then down again for a total of 3x37= 111 feet of wire on the vertical side. On the horizontal just bend back at the end or let the end drop down vertically. Sure it will have narrower bandwidth than a straight dipole but you have a tuner and you can't have a straight dipole.
--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64

"Jack Painter" <223bthp@cox.net> wrote in message
news:n890d.31528$Ka6.3203@okepread03...
>
> "Graybyrd" <me@privacy.net> wrote
> > "Craig Buck" <k4ia@cox.net> wrote:
>>
>> > With linear loading, you can get up a lot of wire in a small space.
> Take a
>> > look at
>> > http://hamgate.sunyerie.edu/~larc/super_linear_-_loaded_inverted_v.htm
> for
>> > an example of a 160 meter inverted vee in a 40 foot yard!
>> >
>> > If you want multi band operation, put up as much wire as you can and
> feed it
>> > with ladder line to a 1:1 balun to a short piece of coax to a tuner.
>> >
>> > Feed it at the top so the maximum current is up high.
>> >
>> > If an inverted L works for your lot, try feeding it at the top middle
>> > instead of the bottom end and using the linear loading technique to
>> > make
>> > each leg longer. According to Cebik if you can get 3/8s wavelength,
>> > you
> are
>> > very close to the full performance of a half wave. Feeding at the top

>> > middle does not require a radial field to work.
>> > --
>> > Radio K4ia
>> > Craig "Buck"
>> > Fredericksburg, VA USA
>> > FISTS 6702 cc 788 Diamond 64
>> [snip]
>>
>> Some nice suggestions, there, especially the point about keeping the
>> maximum current area of the antenna as high as possible.
>>
>> The antenna can be end-fed (high impedance), off-center fed (moderate
>> impedance) and center-fed (low impedance). With a good antenna tuner, I
>> don't s'pose it much matters about impedance, as long as the varying
>> amounts fall within the tuner's range.
>>
>> It was a revelation to me to realize that a half-wave length of wire
>> doesn't really care where it is fed: end, off-center, or mid-point. The
>> high-current portion will be in the middle and the high-voltage points
>> will be at the ends, regardless of where the feed point is located, as
>> long as the wire is resonant at the operating frequency.
>>
>> Linear loading is effective, but as more wire is tightly folded back
>> from the ends, the more narrow the 'bandwidth' becomes, limiting the
>> tuneable range. This would also pretty much kill the multi-band utility
>> of the antenna.
>>
>> I use a 130-foot ladderline fed dipole, center-fed. In a location like
>> yours, I'd keep as much of the center portion of the antenna as high and
>> level as possible, and then at each far end I'd fold them down and to
>> the side, and then back along the fence toward to the center as far as
>> needed, clipping the wire to stand-off insulators and keeping them up
>> out of reach of curious fingers. The radiation from the end portions is
>> less, and is a practical compromise for 80 meters and up.
>>
>> For 160 meter operation, I use "clip on" extensions that run along my
>> perimeter fence on both sides, and they make a sort of "Z" in respect to
>> the main antenna. This works very well, letting the center part of the
>> dipole radiate up high, while providing enough physical wavelength to
>> allow tuning.
>>
>> All of this is a compromise, of course, but it's practical and effective.
>>
>> I suspect that the performance of the "all band" antenna is somewhat
>> less effective on 20 meters up .. but this is a much more approachable
>> situation. I've acquired an end-fed trapped half-wave vertical for 20
>> thru 10 meters that is only 17 feet in length. I plan to mount it on a
>> mast alongside the house. I suspect that the radiation pattern on 20
>> meters and up from this "vertical halfwave" will be much more evenly
>> distributed and predictable than the multi-node variations of the

>> tuneable dipole. Between the two antennas, one should be pretty well
>> covered, given the space restrictions.
>>
>> Gray K7VGW
>>
>
> Many thanks. I do not have the space for this 4th HF antenna to get 1/2
> wavelength of 2.182 mhz (214'). I can manage 1/4~ in the fashion of an
> inv-L
> antenna. A big compromise to begin with, but how would that utilize it's
> desired 1/4~ electrical length if I fed it anyplace but from the end? I
> can
> add radials and will have to do so if the end-fed inv-L turns out to be
> the
> best by consensus. Earth is sandy with a little clay - not very good. An
> MFJ-962D manual or MFJ-994 ATU, whichever performs better, and a 1:1
> current
> balun at the feedpoint (if helpful) will be used. Estimated height of the
> vertical radiator from shield-grounded feedpoint to the "L" would be 37'
> and
> the remaining 70' of radiator would be horizontal. Comments on the
> expected
> efficiency of this arrangement for best performance on 2182-4125 khz are
> greatly appreciated. Anyone who is capable of modeling this design, that
> would be seriously helpful too ;-)
>
> 73,
>
> Jack Painter
> Virginia Beach VA
>
>

3067. Re: horizontally polarized antenna over ground plane

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 12:28:40 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41419f8a_6@corp.newsgroups.com>
Source record: 89688

Ian White, G3SEK wrote:
> The IEEE Dictionary mavens have produced a very HF-centric definition of
> "ground wave", by defining it to include all modes of propagation except
> "sky wave"; where "sky" is exclusively defined as "ionospheric".

"sky wave - a radio wave propagated obliquely toward, and returned from,
the ionosphere."

Apparently, if it's not returned from the ionosphere, it's not a
sky wave. That implies that the stars are not in the sky. :-)
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3068. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 12:46:21 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4141a3ad_6@corp.newsgroups.com>
Source record: 89690

Richard wrote:
> Just wondering: If you had a 33 foot horizontal wire, fed at one end with a
> ladder line, which was connected to an atu, it would work on 20 metres, but
> would it work on 40, 80 and 160metres? TIA.

On 40m, 80m, and 160m, it would act more like an inverted-L
with lots of feedline radiation. On those bands, you might
as well put up an inverted-L.

On 20m, it would have a very high feedpoint impedance in the
neighborhood of thousands of ohms. The feedpoint current is
pretty low so the current unbalance has a limit. For 100w, the
feedpoint current would be about 0.15a. Of course, the feedpoint
current in the other wire is zero since it is floating at the
antenna feedpoint.

On 40m, it would have a very low feedpoint impedance in the
neighborhood of 40 ohms. For 100w, the feedpoint current
would be about 1.5a, a magnitude more current unbalance
than the 20m case.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3069. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 12:49:31 UTC
From: jqo <jquon@ltd.com>
Message-ID: <vph0d.464$ns4.335@newsfe4-gui.ntli.net>
Source record: 89689

Hello,

Firstly what does "Q" stand for?

You could try and shield the antenna from the other transmitter depending on where everything is located. You might be better buying a decent tuner with a narrower filter built in, often Kenwood or Sony have this feature. I have a DENON and it suffers from the same problem of having WIDE filters so it can't select individual stations too well without getting hammered by the one next door.

"A-Tech" <atech@austin.rr.com> wrote in message news:ow90d.7798$le.1852@fe2.texas.rr.com...
> Hi,
>
> I am a newbie here and have just dropped in to ask a single technical
> question.
>
> Living as I do in a suburban area, I use an FM antenna to draw the
> stations
> located in
> a certain vector from me. A station of interest is located at 107.1MHz
> but
> is interfered with by an off-axis stronger signal at 106.9MHz
>
> The FM antenna has a "standard" 300ohm screw connection for the lead-in
> (to
> which I connect
> a 300/75 xfmr and use coax down).
>
> I would appreciate anyone's help in designing and implementing a notch
> filter that would suck
> out a major part of the interfering energy.
>
> It seemed to me that a reasonable attempt would be to use a piece of
> 300ohm
> flat-lead and short
> it at an appropriate distance from the screw-terminals of the antenna.
> None
> of my attempts have
> yielded any observable improvements. It may be that the filter must be
> "deeper" (higher Q?) than
> what my attempts provide.
>
> Any ideas?

>
> Thank you.
>
> ...Bryce
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.756 / Virus Database: 506 - Release Date: 09/09/2004

3070. AH-4 Tuner and Attic Wire, Comments Please

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 13:10:16 UTC
From: Tom S <nobody@home.com>
Message-ID: <chs80r$gq9$1@avnika.corp.mot.com>
Source record: 89691

My current attic situation consists of a 20M dipole, a 30M and two 40M MicroVerts, and an 80M Hamstick Dipole. Using a homebrew antenna switch, I can switch between all these and use a tuner in the shack to make everything look good.

I was thinking of doing the following and am looking for opinions/sugestions/comments both good and bad.

I would remove all the stuff above and run ~100 ft of 14G insulated solid copper house wire around the perimeter of the attic. Use the control cable for the switch to run a Icom AH-4 auto-tuner connected to the wire. The wire will be run in "T" figure (I'll forgo the ascii art). Basically; West ~15', North 15', East 10', North 15', East 10', South 15', East 10', South 15', and back West near the start of the run. I only have access to the metal conduit runs on the attic for ground.

This is the setup I had, along with a homebrew balun to feed the coax) for my SWL days and it worked pretty well. I pulled the wire down when I put all the other stuff up there but can re-install in any configuration available. The longest straight run I can make is ~ 35' diagonally. Woulkd I be better off just running a straight piece rather then all the ziggin' and zaggin'?? How about putting it up as a big "Z" (25' West, 35' diagonally NE, then 20' East)??

Any inputs on this plan are appreciated befor I spend the $$ on the tuner.

Thanks,

Tom - AC9TS

3071. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 14:17:41 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <9li0d.3450$9N5.324183@twister.southeast.rr.com>
Source record: 89692

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:9oh1k0pqq4pam1opuvr5t1637bt41sf1fm@4ax.com...
> On Thu, 09 Sep 2004 19:42:41 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >This equates to about 40 ohms
> >impedance seen at the antenna base. This also agrees with my antenna
> >analyzer. Antenna is a full length 1/4 wl antenna on 20m. I was figuring
37
> >or soo for this.
>
> Hi Jimmie,
>
> So you have no radials?
>
Yes I alreaady described it once in this thread.
> 73's
> Richard Clark, KB7QHC

3072. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 14:25:15 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <fPi0d.3453$9N5.324522@twister.southeast.rr.com>
Source record: 89693

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:9oh1k0pqq4pam1opuvr5t1637bt41sf1fm@4ax.com...
> On Thu, 09 Sep 2004 19:42:41 GMT, "Jimmie" <Gfender@carolina.rr.com>
> wrote:
>
> >This equates to about 40 ohms
> >impedance seen at the antenna base. This also agrees with my antenna
> >analyzer. Antenna is a full length 1/4 wl antenna on 20m. I was figuring
37
> >or soo for this.
>
> Hi Jimmie,
>
> So you have no radials?
>
Described the radials once but that text has been snipped.

12 12f t wires, Center ground stake 10 ft long, far end of each wire has a
stake about 3 ft long. These are used more to just hold the wires in place.
> 73's
> Richard Clark, KB7QHC

3073. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 14:55:03 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <cfj0d.178414$Lj.153426@fed1read03>
Source record: 89694

"Craig Buck" <k4ia@cox.net> wrote

> Two big advantages of the center top feed as opposed to bottom end feed is
> center top requires no radials. Bottom L will need a minimum of 8 100
foot
> radials in your application and some would argue you need many more than
8.
> Have fun burying 800+ feet of wire. Second, top feed gets the high
current
> radiating part of the antenna up higher. Check out
> http://www.cebik.com/ltv.html and his discussion of ladder line at
> http://www.cebik.com/gup/gup32.html. He concludes a 1:1 balun is best.
>
> If you have 37 feet of height you can feed at the top and run the wire
> straight down, back up and then down again for a total of 3x37= 111 feet
of
> wire on the vertical side. On the horizontal just bend back at the end or
> let the end drop down vertically. Sure it will have narrower bandwidth
than
> a straight dipole but you have a tuner and you can't have a straight
dipole.
> --

Hi Craig, Mr. Cebik says nothing about wrapping radiators back and forth
near each other as the earlier referenced url:
http://hamgate.sunyerie.edu/~larc/super_linear_-_loaded_inverted_v.htm

Cebik does comment:
"Bending the horizontal arm far end down: If horizontal space is limited, a
common practice is to bend (or dangle) the outer ends of a dipole downward.
since the region is the high voltage and low current portion of the antenna,
the radiation pattern is least affected by modifying the geometry." -and-

"Like many wire antennas, the inverted-L will tolerate moderate alterations
of geometry to fit the space available and still yield good, if not peak,
performance."

> >> > each leg longer. According to Cebik if you can get 3/8s wavelength,
> >> > you
> > are
> >> > very close to the full performance of a half wave. Feeding at the
top
> >> > middle does not require a radial field to work.

It doesn't appear that Cebik intended to imply that 3/8~ off-center feed
would ever approach true1/2~ dipole performance, just that it would still

operate. These off-center-fed variations (of Carolina Windhams?) are confusing, no matter how much wire they use. Remember I don't need an all-band compromising performer like the T2FD or Windham, but a specific performer on 2182 Khz, and hopefully at least through 4125 Khz. Doing this with 70' of horizontal span and two vertical attachment points about 37' high is the challenge I am asking for help with. I cannot run anything like KG�ZP does, which creates (in his location) a near-field coupling nightmare, in my opinion. Your suggestion (doubling the verticals), which varies from both the KG�ZP design and Cebik's "moderate geomtery alterations", would at least add electrical length, but it remains off-center-fed and therefore never creates a 1/2~ dipole, correct?

If I stuck with a 1/4~ end-fed L, and only used 8 radials of 20-40', could this still outperform an off-center-fed antenna off any length on 2182 Khz?

Thanks again for the comments and ideas,

Jack painter
Virginia Beach VA

3074. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 14:56:21 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <4141c42c_1@news1.prserv.net>
Source record: 89695

Many years back, either Radio Electronics or Radio and TV news published a how-to article which described using two
identical Yagis horizontally "stacked" and gave formulas or charts to determine the spacing for creating an off axis
notch to do what Bryce needs to do. Otherwise, either Dale's filters or some from an outfit named Eagle may be the only
answer.

--
Crazy George
Remove N O and S P A M imbedded in return address

3075. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 15:00:31 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <4141c42d_1@news1.prserv.net>
Source record: 89696

All the individual "loose" connections at the joints are notorious for creating intermod. It may or may not be a
problem in your case. For receiving, you may hear numerous broadcast station harmonics and intermod combinations. When
transmitting, your signal will likely be "dirty" and you may get BCI and TVI complaints, even though your transmitter is
clean. Sort of like putting a thousand diodes in the antenna.

--
Crazy George
Remove N O and S P A M imbedded in return address
"Jack Twilley" <jmt+usenet@twilley.org> wrote in message
news:86zn3zsztg.fsf@duchess.twilley.org...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> My yard is adjacent to a large park. The park's border with yards
> like mine consists of a chain link fence that's in excess of one
> thousand feet in length. The vegetation is such that I could run a
> long wire about a foot over the top of the fence for a large part of
> that thousand feet. Would the chain link fence cause negative
> interactions? Would this be a receive-only antenna and not any good
> for transmitting? I'd connect it to the random wire lug on my MFJ
> Versa Tuner II to match it to my Kenwood tube rig.
>
> Thoughts? Comments? Suggestions?
>
> Jack.
> (I'm going to try it regardless for receiving, but what should I expect?)
> - --
> Jack Twilley
> jmt at twilley dot org
> http colon slash slash www dot twilley dot org slash tilde jmt slash
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.2.5 (FreeBSD)
>
> iD8DBQFBQPywGPFSfAB/ezgRAt+PAJ9GsIO0aHvMvOEOE9bESpf44lFWwwCfeTBs
> feiNwnBJMkGUBfR0hZ5yyDc=
> =r05z
> -----END PGP SIGNATURE-----

3076. Re: Station Grounding

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 15:18:42 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <3vg3k05p3vi3u7hcqtpbumkl4rbiqu21ef@4ax.com>
Source record: 89697

On Thu, 9 Sep 2004 22:16:35 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

|I am not very familiar with USA power-grounding regulations and they
|probably vary from state to state. But I am under the impression that in
|some simple circumstances, perhaps domestic, a single ground rod is
|considered adequate for safety purposes.
|
|Under similar circumstances a maximum ground electrode resistance (whatever
|its construction) of 50 ohms is specified.
|
|A 'standard' ground rod is 8 feet long and 1 inch in diameter.
|
|An average soil resistivity is 500 ohm-metres (= 2 mS). See Eznec?
|
|The calculated resistance of a single standard rod in average soil is 194
|ohms. (I'm sure the calculating formula can be found somewhere on the IEEE
|shelves. There ought to be greater use made of it.)

I responded to this in more detail but the post never came through.
So more quickly this time see:

http://www.usda.gov/rus/telecom/publications/pdf_files/1751f802.pdf

[snip]

3077. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 16:10:57 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnck3kgh.u5e.bit-bucket@shell.config.com>
Source record: 89698

On Fri, 10 Sep 2004 03:50:44 GMT, A-Tech hath writ:
> Hi,
>
> I am a newbie here and have just dropped in to ask a single technical
> question.
>
> Living as I do in a suburban area, I use an FM antenna to draw the stations
> located in
> a certain vector from me. A station of interest is located at 107.1MHz but
> is interfered with by an off-axis stronger signal at 106.9MHz
>
> The FM antenna has a "standard" 300ohm screw connection for the lead-in (to
> which I connect
> a 300/75 xfmr and use coax down).
>
> I would appreciate anyone's help in designing and implementing a notch
> filter that would suck
> out a major part of the interfering energy.
>
> It seemed to me that a reasonable attempt would be to use a piece of 300ohm
> flat-lead and short
> it at an appropriate distance from the screw-terminals of the antenna. None
> of my attempts have
> yielded any observable improvements. It may be that the filter must be
> "deeper" (higher Q?) than
> what my attempts provide.

I think, as Roy suggested, that your best attack will be to aim
the antenna to provide the deepest null to the "... off-axis
stronger signal at 106.9MHz". Peaking the desired signal is
only a secondary goal here.

Don't spend a lot of Big Bucks trying to solve this problem.
Marvin's Law (Murphy's brother) says that once you _have_ put
considerable money, effort, and time into this, the station's
(new) owner will change the format to Country or Jesus.
(Now, How's *that* for provoking thread drift?)

gl es 73
Jonesy
--
| Marvin L Jones | jonz | W3DHJ | linux
| Gunnison, Colorado | @ | Jonesy | OS/2 __
| 7,703' -- 2,345m | config.com | DM68mn SK

3078. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 16:31:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dcl3k05aa59b5guoou7niqf2vt8bcs2nrq@4ax.com>
Source record: 89699

On Fri, 10 Sep 2004 10:55:03 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>If I stuck with a 1/4~ end-fed L, and only used 8 radials of 20-40', could
>this still outperform an off-center-fed antenna off any length on 2182 Khz?
>
>Thanks again for the comments and ideas,

Hi Jack,

Are you anticipating an emergency? (perhaps a stupid question given
the flurry of Hurricanes) I presume you are interested in listening;
and if so, you won't find any remarkable variation in signal strength
across a wide spectrum of antenna styles (ï¿½50% in bulk wire
differentials) and/or topologies.

73's
Richard Clark, KB7QHC

3079. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 16:32:54 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <g8l3k0lrhianbt94idah8cn00f2rpr3b74@4ax.com>
Source record: 89700

On 10 Sep 2004 16:10:57 GMT, Allodoxaphobia <bit-bucket@config.com> wrote:

>> I am a newbie here and have just dropped in to ask a single technical
>> question.
>>
>> Living as I do in a suburban area, I use an FM antenna to draw the stations
>> located in
>> a certain vector from me. A station of interest is located at 107.1MHz but
>> is interfered with by an off-axis stronger signal at 106.9MHz

Hello Bryce,

I'm sure you're aware that these two frequencies are adjacent channels. The FCC allocated channels such that adjacent channels stations would not be located in the same geographical area, expressly fo the purpose of preventing such interference. Obviously the two channels involved are not in the same area, and it seems strange to me that you can even hear the station on 107.1 MHz.

I believe that your only hope is to orient your antenna to place the null in the direction of the 106.9 station, as Roy suggested,, but I'm not sure that even that will reduce the 106.9 station sufficiently to allow acceptable reception of the 107.1 station. In addition, I firmly believe that attempting to filter out an adjacent channel will be futile, and not worth the effort.

Walt, W2DU

3080. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 16:40:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <72m3k0pi83386sbnco94bkgfbid1n6qv0c@4ax.com>
Source record: 89701

On Fri, 10 Sep 2004 14:25:15 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>12 12f t wires, Center ground stake 10 ft long, far end of each wire has a
>stake about 3 ft long. These are used more to just hold the wires in place.

Hi Jimmy,

Modeling concurs with your description, measurements and conclusion.

73's
Richard Clark, KB7QHC

3081. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 17:02:57 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chsmo1gjp1@sparta.btinternet.com>
Source record: 89702

Jimmie wrote -

> 12 12f t wires, Center ground stake 10 ft long, far end of each wire has a
> stake about 3 ft long. These are used more to just hold the wires in
place.

==========

Jimmie, For amusement and my education, would you mind letting us have a few more crude details of your ground radial system please.

TYPE OF SOIL

(A) Is it high quality, fertilised garden loam, perhaps very slightly sandy which can grow flowers and shrubs of which you can be proud when you try. Perhaps used to be farm or orchard or agricultural land.

(B) Is it slightly gritty, stoney, but ample body which can still make a nice flower garden. Quite fertile even though it may be overgrown with profuse, dense, robust weeds. (Like mine.)

(C) Is it sandy, clayey, with small stones or pebbles? Needs attention with fertilisers to grow nice flowers. But a lawn might do very well.

(D) Does it contain stones, sand, grit and small rocks with only 75% of good soil but still needs hoeing and weeding to keep looking presentable.?

(E) Is it poor soil, smewhat infertile, difficult to manage as a flower garden? Could be turned into a rock garden. Even the weeds don't do very well.

(F) Thin layer of mediocre soil over bedrock.

MOISTURE CONTENT

(G) Fairly wet.
(H) Nicely moist.
(I) Slightly damp.
(J) Well drained, dry.
(K) Dusty.
(L) Arid.

ROUGH DEPTH OF WIRE BURIAL.

In tenths of an inch if very shallow.
Zero if just trodden in, in good contact with soil surface.

Thank you.

Reg.

3082. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 17:39:05 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ZEl0d.32104$Ka6.30934@okepread03>
Source record: 89703

"Richard Clark" <kb7qhc@comcast.net> wrote

> On Fri, 10 Sep 2004 10:55:03 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >If I stuck with a 1/4~ end-fed L, and only used 8 radials of 20-40',
could
> >this still outperform an off-center-fed antenna off any length on 2182
Khz?
> >
> >Thanks again for the comments and ideas,
>
> Hi Jack,
>
> Are you anticipating an emergency? (perhaps a stupid question given
> the flurry of Hurricanes) I presume you are interested in listening;
> and if so, you won't find any remarkable variation in signal strength
> across a wide spectrum of antenna styles (�50% in bulk wire
> differentials) and/or topologies.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,

The 2182-4125 Khz USB antenna reqirement is for transmit and receive operation from a USCG Auxiliary radio facility. I agree the reception of 2182 across all of my HF antennas is about the same, typically copying stations 500+miles away in the summer, and certainly better at night, and in winter. But I need to improve transmit capability to a reliable 200 miles minimum. And yes, we do get grazed often and ocassionally hit by hurricanes here. ;-)

Jack

3083. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 18:22:54 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <chsrimrol1@newshost.mot.com>
Source record: 89704

The connections don't have to be diodes at all to cause trouble. Although that is one possibility, there's another effect.

The fence will have RF current induced in the conductors - posts, rails and links. These currents can come from any transmitter. After all, it is just like any other antenna, except that it isn't connected to a receiver. Any and all conductors that exist are picking up RF currents just like the ones we call antennas. There's nothing special about those conductors we call antennas (in this regard). It is why the Yagi works.
Where two conductors touch, you may or may not have current through the joint depending upon the RF field. As these conductors make and break contact, lets say in the wind, the current through these connections will also most certainly change. This changes the current in the conductors and since these currents cause some small amount of radiation, the resulting radiated field will change also. Because your antenna is near to these unintended elements and can pick up a significant amount of signal from them, two effects can result.

1- When you receive, this can cause noise in your receiver. What kind of noise? The easiest to understand would be if you have a local radio or TV station. The currents caused by this station can be rather high and therefore significant. Becuase the field in close proximity to this "dirty" antenna is changing in a noisy manner (described above), due to the bad connections, the signal as seen from this transmitter is also dirty, or noisy. It looks just like modulation, noise modulation extending, in the two sidebands, away from the carrier. To a receiver this looks just like noise modulation on the transmitter.
The bandwidth of this kind of noise can be rather startling. A 10 MHz transmitter can have noise easily extending up into the GHz region. If the field from the transmitter is strong enough, the noise can cover what you are trying to recieve. I had to troubleshoot this problem at 150 MHz once. This can be duplicated by listening slightly off channel of a signel. A 2M repeater will do. Just go 5 or 10 KHz. If you are very close, you may be able to tune further off. Now just take any two conductors of a few inches or more in size and rub them together within a few inches / feet of you receving antenna. I call this "the screwdriver effect" because I first saw it when a screwdriver was drawn across a chassis & I heard noise.

2- On transmitting, you have the same situation, except YOU are the close transmitter and your signal can have this noise modulation. I lied. Its the same effect.

On calm days, perhaps you'll be ok.... perhaps even on windy days. RF is fickle.

On the Program Apollo ocean ships used for monitoring communications around the globe and spacecraft recovery, chain used on parts of the deck railings was found to be the source of noise which modulated the multi-Kw HF transmitters resulting in degraded Radar performance! I think it initially made the radar useless.

--
Steve N, K,9;d, c. i My email has no u's.

"Crazy George" <muNnscOh@attSglPobaAl.nMet> wrote in message news:4141c42d_1@news1.prserv.net...
> All the individual "loose" connections at the joints are notorious for creating intermod. It may or may not be a
> problem in your case. For receiving, you may hear numerous broadcast station harmonics and intermod combinations. When
> transmitting, your signal will likely be "dirty" and you may get BCI and TVI complaints, even though your transmitter is
> clean. Sort of like putting a thousand diodes in the antenna.
>
> --
> Crazy George
> Remove N O and S P A M imbedded in return address
> "Jack Twilley" <jmt+usenet@twilley.org> wrote in message news:86zn3zsztg.fsf@duchess.twilley.org...
> > -----BEGIN PGP SIGNED MESSAGE-----
> > Hash: SHA1
> >
> > My yard is adjacent to a large park. The park's border with yards
> > like mine consists of a chain link fence that's in excess of one
> > thousand feet in length. The vegetation is such that I could run a
> > long wire about a foot over the top of the fence for a large part of
> > that thousand feet. Would the chain link fence cause negative
> > interactions? Would this be a receive-only antenna and not any good
> > for transmitting? I'd connect it to the random wire lug on my MFJ
> > Versa Tuner II to match it to my Kenwood tube rig.
> >
> > Thoughts? Comments? Suggestions?
> >
> > Jack.
> > (I'm going to try it regardless for receiving, but what should I expect?)
> > - --
> > Jack Twilley
> > jmt at twilley dot org
> > http colon slash slash www dot twilley dot org slash tilde jmt slash
> > -----BEGIN PGP SIGNATURE-----
> > Version: GnuPG v1.2.5 (FreeBSD)
> >
> > iD8DBQFBQPywGPFSfAB/ezgRAt+PAJ9GsIO0aHvMvOEOE9bESpf44lFWwwCfeTBs
> > feiNwnBJMkGUBfR0hZ5yyDc=
> > =r05z
> > -----END PGP SIGNATURE-----

>
>

3084. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 18:38:34 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <chssg1$ru7$1@newshost.mot.com>
Source record: 89705

"Walter Maxwell" <w2du@iag.net> wrote in message
news:g8l3k0lrhianbt94idah8cn00f2rpr3b74@4ax.com...
> On 10 Sep 2004 16:10:57 GMT, Allodoxaphobia <bit-bucket@config.com> wrote:
>
> >> I am a newbie here and have just dropped in to ask a single technical
> >> question.
> >>
> >> Living as I do in a suburban area, I use an FM antenna to draw the
stations
> >> located in
> >> a certain vector from me. A station of interest is located at 107.1MHz
but
> >> is interfered with by an off-axis stronger signal at 106.9MHz
>
> Hello Bryce,
>
> I'm sure you're aware that these two frequencies are adjacent channels.
The FCC
> allocated channels such that adjacent channels stations would not be
located in
> the same geographical area, expressly fo the purpose of preventing such
> interference. Obviously the two channels involved are not in the same
area, and
> it seems strange to me that you can even hear the station on 107.1 MHz.
....
> Walt, W2DU

When you are BETWEEN markets, this is common. Or, if you want to listen
to a distant station and the wrong one is close. I'm equi-distant from
Chicago, Milwaukee and Rockford and have this problem hearing WDCB 90.9,
west of CHi-town with WHAD 90.7, S-W of Milwaukee pounding in. They're in
different markets.

This was discussed not to long ago here. A notch in the antenna pattern
is not too difficult. Two vertical dipoles spaced (about) a half wave and
fed with the proper feed line so they are 180 degrees out from each other,
can make a nice null - actually two. They are perpendicular to the plane of
the antennas. I'd have to sit and tinker to remember the feed system, but
there has to be 1/2 wave more feed line in one dipole, compared to the
other.
It is also possible to do the same thing and get a one notch pattern
(cardioid). If I recall, the antennas are spaced 1/4 wave apart and the
feed is 3/4 wave of feed line between them. Again, the receiver simply
connects to one of them and the null is off one end.
--

Steve N, K,9;d, c. i My email has no u's.

3085. Re: AH-4 Tuner and Attic Wire, Comments Please

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 18:48:09 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <chst20$s03$1@newshost.mot.com>
Source record: 89706

"Tom S" <nobody@home.com> wrote in message
news:chs80r$gq9$1@avnika.corp.mot.com...
> ...I was thinking of doing the following and am looking for
> opinions/sugestions/comments both good and bad.
>
> ...run ~100 ft of 14G insulated solid
> copper house wire around the perimeter of the attic. Use the control
cable
> for the switch to run a Icom AH-4 auto-tuner connected to the wire. The
> wire will be run in "T" figure (I'll forgo the ascii art). Basically;
West
> ~15', North 15', East 10', North 15', East 10', South 15', East 10',
South
> 15', and back West near the start of the run. I only have access to the
> metal conduit runs on the attic for ground.
>
> [snip SWL talk] The longest straight run I can make is ~ 35' diagonally.
Woulkd
> I be better off just running a straight piece rather then all the ziggin'
> and zaggin'?? How about putting it up as a big "Z" (25' West, 35'
> diagonally NE, then 20' East)??
> Any inputs on this plan are appreciated befor I spend the $$ on the tuner.
> Thanks, Tom - AC9TS

I'd go for the long run or perhaps a 90 degree "L" using the two longest
possible lengths.

35' is close to a 1/2 wave on 20 and 2 halves on 10 making it harder to
match (high Z) on those bands. It's nice to keep your antenna away from an
even number of half waves so the impedance isn't too high.

HOWEVER, using the conduit for "ground" means that IT WILL BE part of the
antenna. It will probably be near the antenna. Not good.
It is anther random variable. Not good.

Not being "good" doesn't stop many of us. SO...RF is fickle...try it.
--
Steve N, K,9;d, c. i My email has no u's.

3086. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 20:13:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ii24k0t4dutaq47osgc8po74oak2fpavm0@4ax.com>
Source record: 89707

On Fri, 10 Sep 2004 13:39:05 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

> But I need to improve transmit capability to a reliable 200 miles
>minimum. And yes, we do get grazed often and ocassionally hit by hurricanes
>here. ;-)

Hi Jack,

What options are available to you? Got any towers?

73's
Richard Clark, KB7QHC

3087. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 21:21:09 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <aVo0d.1432$fA1.1195@lakeread02>
Source record: 89708

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ii24k0t4dutaq47osgc8po74oak2fpavm0@4ax.com...
> On Fri, 10 Sep 2004 13:39:05 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> > But I need to improve transmit capability to a reliable 200 miles
> >minimum. And yes, we do get grazed often and ocassionally hit by
hurricanes
> >here. ;-)
>
> Hi Jack,
>
> What options are available to you? Got any towers?
>
> 73's
> Richard Clark, KB7QHC

Richard, towers are courtesy of Virginia Loblolly Pine! They run all the way into the heavens, attract lightning like nobody's business, and pretty much ruin homes when they come down in hurricanes or Nor'Easter's. But they are also god-given antenna towers offering large limbs starting at about 50' on up. I try to use the lower parts of the trees (50') so as to reduce sway. From a 3' dia tree there is none, the more slender sky-cranes move a lot.

```
| |
-0- ------------------------------------0-
| |

-- --
| |
^ |----- / /------|
| | |
50' | |
| |
| |
------------ 70' ----------------
```

Basically, I have similar arrangements for 5 & 8mhz dipole, longwire, random wire, etc.

Jack

3088. 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 21:49:13 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10k48almvc5ui2e@corp.supernews.com>
Source record: 89709

Hi all...
I am starting to work on something to use on 160 thru 20 meters.
I currently have an aluminum mast that is 32 ft long with a small cap hat on top.
the antenna will sit in the center of an area approx 50 z 50' (backyard). I plan to put down 40 plus radials, the majority which will be situated to radiate out from the base of the vertical.
some will meander along the house foundation and property line..
I plan on also tying in the galvanized (not chain link) fence around the back yard to the radial system, as well as the house plumbing.
40 meters should be direct feed.
I will homebrew a matching L network for use on 160 thru 60 meters.
I will also try a 20 meter tuning stubb.
Does anyone know what the size of the loading coil that MFJ uses in their 80 & 40 meter vertical?
I have read of just about everything I can find online of this sort of project and have played with Eznec demo a bit and think this will be a doable project.

3089. WANTED: Hi-Q-Antennas Website

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 22:08:38 UTC
From: roland@no-spam.com
Message-ID: <414225ce.109009497@az.news.verio.net>
Source record: 89710

What happened to the subject website ....?
Roland - WB6LNA
roland@geter.org

3090. Re: AH-4 Tuner and Attic Wire, Comments Please

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 22:12:48 UTC
From: Aaron Jones <noemail@noemail.com>
Message-ID: <td94k0lcumv1j49810rrsjkr4858c8e3e4@4ax.com>
Source record: 89711

"Tom S" <nobody@home.com> wrote:
>My current attic situation consists of a 20M dipole, a 30M and two 40M
>MicroVerts, and an 80M Hamstick Dipole. Using a homebrew antenna switch, I
>can switch between all these and use a tuner in the shack to make everything
>look good.
>
>I was thinking of doing the following and am looking for
>opinions/sugestions/comments both good and bad.
>
>I would remove all the stuff above

Leave the old antennas up there. That makes it easy and fun to make comparisons
to see how well your new antenna does as compared to the old.

>and run ~100 ft of 14G insulated solid
>copper house wire around the perimeter of the attic...

This sounds like you almost have a loop. You might consider trying a random
length loop around the perimeter edge of the roof. one big advantage is that it
requires no ground with which to work against. I have about 200' of wire in mine
which peaks at about 20' up. I feed mine with ladder line, but for short runs
coax is ok as the loss would be small. I lucked out because by using a 4:1 balun
it turned out that my TS870's internal tuner is happy with it on all HF bands
except 80 and 160. For those bands an external tuner works fine. It's no DX
antenna, but I never have any trouble making or finishing QSOs. And compared to
my 40M Hamstick attic dipole, the loop gets on average about a 2 s-unit better
report.

3091. Re: WANTED: Hi-Q-Antennas Website

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 22:22:33 UTC
From: roland@no-spam.com
Message-ID: <414228bb.109758023@az.news.verio.net>
Source record: 89712

Hm-m-m-m-.....
My browser just sits there forever never accessing the website.
It worked once a couple weeks ago but not anymore. Very strange!!!
This ever happen to you before? I'm using XP Home.
Roland

On Tue, 07 Sep 2004 20:07:14 GMT, larry d clark <buddycl@swbell.net>
wrote:

>RSG wrote:
>> What happened to the subject website ....?
>> Roland - WB6LNA
>> roland@geter.org
>
>this works for me on 7 sep 04, 1505 cst:
>
>http://www.hiqantennas.com/
>
>kd5foy

3092. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 22:26:01 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <49a4k09vgst88rhm0frotg9jv8b6b80c5r@4ax.com>
Source record: 89713

On Fri, 10 Sep 2004 13:38:34 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

> When you are BETWEEN markets, this is common. Or, if you want to listen
>to a distant station and the wrong one is close. I'm equi-distant from
>Chicago, Milwaukee and Rockford and have this problem hearing WDCB 90.9,
>west of CHi-town with WHAD 90.7, S-W of Milwaukee pounding in. They're in
>different markets.
>
> This was discussed not to long ago here. A notch in the antenna pattern
>is not too difficult. Two vertical dipoles spaced (about) a half wave and
>fed with the proper feed line so they are 180 degrees out from each other,
>can make a nice null - actually two. They are perpendicular to the plane of
>the antennas. I'd have to sit and tinker to remember the feed system, but
>there has to be 1/2 wave more feed line in one dipole, compared to the
>other.
> It is also possible to do the same thing and get a one notch pattern
>(cardioid). If I recall, the antennas are spaced 1/4 wave apart and the
>feed is 3/4 wave of feed line between them. Again, the receiver simply
>connects to one of them and the null is off one end.

Yeah, Steve, but isn't FM broadcast wirh horizontal polarfization? With vertical
dipoles the only signal you'll receive is from reflect;ions off objects such as
buildings. What kind of reflection coefficient would one expect ? Enough for a
good signal?

Walt

3093. Re: WANTED: Hi-Q-Antennas Website

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 22:31:51 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnck4aqn.2336.bit-bucket@shell.config.com>
Source record: 89714

[Egregious top-posting corrected]

On Fri, 10 Sep 2004 22:22:33 GMT, RSG hath writ:
> On Tue, 07 Sep 2004 20:07:14 GMT, larry d clark <buddycl@swbell.net>
> wrote:
>
>>RSG wrote:
>>> What happened to the subject website ....?
>>> Roland - WB6LNA
>>> roland@geter.org
>>
>>this works for me on 7 sep 04, 1505 cst:
>>
>>http://www.hiqantennas.com/
>>
>>kd5foy

> Hm-m-m-m-.....
> My browser just sits there forever never accessing the website.
> It worked once a couple weeks ago but not anymore. Very strange!!!
> This ever happen to you before? I'm using XP Home.
> Roland

WFM .. in konqueror and in FireFox

Jonesy

3094. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 23:03:06 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <10k4cjsj9du0ad7@corp.supernews.com>
Source record: 89715

Hi Jack,

I usually lurk here quietly, but thought
I'd stick my neck out.

I just did a quick analysis on EZNEC.
Imagine a wire that is 50 feet up, 70
feet across the top, hanging down 40
feet on each end for a total of 150 feet.
Feed it in the center of the top with
75 feet of 450 ohm line.

The impedance seen at the end of 75
feet of 450 ohm feedline looked pretty
workable on both 2182 and 4125 kHz.
(Yes, you need an antenna tuner, but
it could be very simple for just two
frequencies.) An NVIS antenna like
this is great for short range (a few
hundred miles).

Download the demo version of EZNEC
from www.eznec.com . It'll take you a
couple of hours to get familiar with it,
but then you can play "what if" with
a lot of simple antennas like this.

73, John - K6QQ

3095. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 23:06:08 UTC
From: jgboyles@aol.com
Message-ID: <20040910190608.21649.00000693@mb-m06.aol.com>
Source record: 89716

>Does anyone know what the size of the loading coil that MFJ uses in their 80
>& 40 meter vertical?

Dentron, The size of the loading coil is not so important as the inductance
of the coil.
What I would advise is put the best ground radial system you can. Beg,
Borrow or Steal an antenna analyzer and determine the impedance of the vertical
at the frequencies you wish to work.
Then use the Smith Chart, to determine what L network configuration will
provide a match.

73 Gary N4AST

3096. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 23:10:02 UTC
From: A-Tech <atech@austin.rr.com>
Message-ID: <evq0d.10073$le.1167@fe2.texas.rr.com>
Source record: 89717

{original msg at end}
Firstly, let me thank you one and all for your responses!!

Also, I did not clearly define the antenna which is a
multi-element yagi of Winegard design - a "standard"
consumer product - and roof mounted.

In addition, I have MapQuested
the two transmitters and find that the interfering
radiation comes from behind, about 25degrees
off axis. This signal originates about 30miles behind
me and the desired signal is about 55miles in front.

Richard Clark took me along the method that I had
tried - and that I have had no success with.

Dale W4OP points out that this type filter,
at these frequencies, have almost no effect - boo!

Roy Lewallen, W7EL, concurred with Dale and suggested
a "phased array" design. Unfortunately, this is beyond
my capabilities. Roy and Walt, W2DU, both agreed that
using "null tuning" might help. Roy also suggested a "choke"
for the feedline to reduce feedline pickup. - But it seems to me
that 95% shielded 75ohm coax should not be a
contributing factor.

Bob suggested that I call the offending station - I did that
but I have to wait until Monday to speak with their
engineer - boo.

Crazy George alluded to an article about constructing
a "stacked yagi" - interesting and within reasonable
economics - but no details or source for details. Ah well.
He also brought back into my memory EagleFilters
which I have used in a cable television distribution
setting. I'm looking them up on the Internet now.

"jqo" suggested shielding from the bad signal, a strategy
I have successfully used in C-Band-satellite-receiving-antenna
placements but....on my rooftop? Also, he suggested a tuner
with better selectivity. I agree and am on eBay looking for
a better unit than the Cadet AM/FM Radio card that is
installed in my PC and connected to the outdoor antenna.

BTW, "jqo", Q, in a filter, means "quality" but is really a
figure of merit that refers to width of the 3db down points

(in frequency) and the total energy removed. High Q filters
have narrow -3db points and suck out LOTS of energy.

Jonesy suggests that if I just wait, like the weather, the station
will change format and I'll no longer care to solve this!!

Thanks all - any additional comments are most welcome.

...Bryce

"A-Tech" <atech@austin.rr.com> wrote in message
news:ow90d.7798$le.1852@fe2.texas.rr.com...
> Living as I do in a suburban area, I use an FM antenna to draw the
stations
> located in a certain vector from me. A station of interest is located at
107.1MHz but
> is interfered with by an off-axis stronger signal at 106.9MHz
>
> The FM antenna has a "standard" 300ohm screw connection for the lead-in
(to
> which I connect a 300/75 xfmr and use coax down).
>
> I would appreciate anyone's help in designing and implementing a notch
> filter that would suck out a major part of the interfering energy.
> It seemed to me that a reasonable attempt would be to use a piece of
300ohm
> flat-lead and short it at an appropriate distance from the screw-terminals
of the antenna. None
> of my attempts have yielded any observable improvements. It may be that
the filter must be
> "deeper" (higher Q?) than what my attempts provide.
>

3097. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 23:11:26 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <ywq0d.1436$fA1.772@lakeread02>
Source record: 89718

Thank you very much John. I admit not giving two hours of learning time to my EZNEC demo, but I wrote it off as too complicated to assimilate in the time I could spend on it. That's an interesting finding on a "short" dipole tuning up on 2182. I had not considered what ladderline to a dipole might allow...

Jack

"John Moriarity" <k6qq@hdo.net> wrote

> Hi Jack,
>
> I usually lurk here quietly, but thought
> I'd stick my neck out.
>
> I just did a quick analysis on EZNEC.
> Imagine a wire that is 50 feet up, 70
> feet across the top, hanging down 40
> feet on each end for a total of 150 feet.
> Feed it in the center of the top with
> 75 feet of 450 ohm line.
>
> The impedance seen at the end of 75
> feet of 450 ohm feedline looked pretty
> workable on both 2182 and 4125 kHz.
> (Yes, you need an antenna tuner, but
> it could be very simple for just two
> frequencies.) An NVIS antenna like
> this is great for short range (a few
> hundred miles).
>
> Download the demo version of EZNEC
> from www.eznec.com . It'll take you a
> couple of hours to get familiar with it,
> but then you can play "what if" with
> a lot of simple antennas like this.
>
> 73, John - K6QQ
>
>

3098. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 23:18:13 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <VCq0d.61$%O5.13@trnddc07>
Source record: 89719

"Walter Maxwell" <w2du@iag.net> wrote in message
news:49a4k09vgst88rhm0frotg9jv8b6b80c5r@4ax.com...
> On Fri, 10 Sep 2004 13:38:34 -0500, "Steve Nosko"
> <suteuve.nosukowicuz@moutouroula.com> wrote:
>
> > When you are BETWEEN markets, this is common. Or, if you want to
listen
> >to a distant station and the wrong one is close. I'm equi-distant from
> >Chicago, Milwaukee and Rockford and have this problem hearing WDCB 90.9,
> >west of CHi-town with WHAD 90.7, S-W of Milwaukee pounding in. They're
in
> >different markets.
> >
> > This was discussed not to long ago here. A notch in the antenna
pattern
> >is not too difficult. Two vertical dipoles spaced (about) a half wave
and
> >fed with the proper feed line so they are 180 degrees out from each
other,
> >can make a nice null - actually two. They are perpendicular to the plane
of
> >the antennas. I'd have to sit and tinker to remember the feed system,
but
> >there has to be 1/2 wave more feed line in one dipole, compared to the
> >other.
> > It is also possible to do the same thing and get a one notch pattern
> >(cardioid). If I recall, the antennas are spaced 1/4 wave apart and the
> >feed is 3/4 wave of feed line between them. Again, the receiver simply
> >connects to one of them and the null is off one end.
>
> Yeah, Steve, but isn't FM broadcast wirh horizontal polarfization? With
vertical
> dipoles the only signal you'll receive is from reflect;ions off objects
such as
> buildings. What kind of reflection coefficient would one expect ? Enough
for a
> good signal?
>
> Walt

To the best of my knowledge- commercial FM broadcast has transmitted on both
V and H for many years- how else would a vertical whip on an automobile
receive FM?

Dale W4OP

3099. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-10 23:53:43 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <kif4k0dlvp6fsfs6o2pvkeccrs02l3u622@4ax.com>
Source record: 89720

On Fri, 10 Sep 2004 23:18:13 GMT, "Dale Parfitt" <par@parelectronics.com> wrote:

>
>"Walter Maxwell" <w2du@iag.net> wrote in message
>news:49a4k09vgst88rhm0frotg9jv8b6b80c5r@4ax.com...
>> On Fri, 10 Sep 2004 13:38:34 -0500, "Steve Nosko"
>> <suteuve.nosukowicuz@moutouroula.com> wrote:
>>
>> > When you are BETWEEN markets, this is common. Or, if you want to
>listen
>> >to a distant station and the wrong one is close. I'm equi-distant from
>> >Chicago, Milwaukee and Rockford and have this problem hearing WDCB 90.9,
>> >west of CHi-town with WHAD 90.7, S-W of Milwaukee pounding in. They're
>in
>> >different markets.
>> >
>> > This was discussed not to long ago here. A notch in the antenna
>pattern
>> >is not too difficult. Two vertical dipoles spaced (about) a half wave
>and
>> >fed with the proper feed line so they are 180 degrees out from each
>other,
>> >can make a nice null - actually two. They are perpendicular to the plane
>of
>> >the antennas. I'd have to sit and tinker to remember the feed system,
>but
>> >there has to be 1/2 wave more feed line in one dipole, compared to the
>> >other.
>> > It is also possible to do the same thing and get a one notch pattern
>> >(cardioid). If I recall, the antennas are spaced 1/4 wave apart and the
>> >feed is 3/4 wave of feed line between them. Again, the receiver simply
>> >connects to one of them and the null is off one end.
>>
>> Yeah, Steve, but isn't FM broadcast wirh horizontal polarfization? With
>vertical
>> dipoles the only signal you'll receive is from reflect;ions off objects
>such as
>> buildings. What kind of reflection coefficient would one expect ? Enough
>for a
>> good signal?
>>
>> Walt
>
>To the best of my knowledge- commercial FM broadcast has transmitted on both

>V and H for many years- how else would a vertical whip on an automobile
>receive FM?
>
>Dale W4OP
>
You're right, Dale, my age and ignorance are showing.

Walt

3100. WANTED: Mosley Mini 33 Tribander

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 00:21:25 UTC
From: roland@no-spam.com
Message-ID: <414244ac.116911369@az.news.verio.net>
Source record: 89621

Will pay cash and shipping from anywhere for subject antenna.
Roland - WB6LNA
1-866-ROLANDG

3101. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 00:27:14 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10k4hj6qn1mrme1@corp.supernews.com>
Source record: 89622

A-Tech wrote:
> . . .
> Roy Lewallen, W7EL, concurred with Dale and suggested
> a "phased array" design. Unfortunately, this is beyond
> my capabilities. Roy and Walt, W2DU, both agreed that
> using "null tuning" might help. Roy also suggested a "choke"
> for the feedline to reduce feedline pickup. - But it seems to me
> that 95% shielded 75ohm coax should not be a
> contributing factor.
>. . .

With the added knowledge of your antenna and your technical capabilities, the approach I'd encourage you to try is to simply turn your antenna while listening. It might not take much turning to get the interfering signal into a null, leaving the desired signal close enough to the peak of the front directional lobe to be strong enough.

The problem with feedline pickup has nothing to do with the shielding, it's caused by current on the outside of the shield. But it's not likely to be a concern with your commercial antenna and coax because of the way these antennas are typically fed.

Roy Lewallen, W7EL

3102. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 02:44:09 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10k4pji21uqih98@corp.supernews.com>
Source record: 89623

A company in FL - well, they might have been blown away by now - called
something like Pizio Technologies makes VHF bandpass filters from "crystal"
elements. Such filters are capable of rejecting adjacent channels in the
150 MHz range and are needed in some cities if you have to put a receiver
downtown.
As Dale points out, it takes a serious filter indeed to perform what you
wish such a filter to perform. On the other hand, I have deliberately tuned
some higher end FM broadcast receivers to a weak adjacent station in the
presence of a fairly strong station to find a bit better than mediocre
performance. Some receivers have much better filtering than other
receivers.
So, as another summery: rotate antenna for best SNR; get a receiver
with better filtering; and consider a special-made crystal filter if you
still have a problem. 73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Dale Parfitt" <par@parelectronics.com> wrote in message
news:_X90d.8722$Va5.8116@trnddc01...
>

> Unfortunately, you will find that the -3dB BW of a single stub is in the
> neighborhood of 5% or >5MHz at your frequency of interest. The
> discrimination between your desired and undsired channels will be
> negligible.
> We manufacture a line of small multiple cavity symmetrical and
asymmetrical
> notch filters- getting under 0.5% BW with small topology filters is nearly
> impossible at VHF.
>
> Dale W4OP
>
>

3103. Suggestions on earth grounding open feeder

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 03:27:31 UTC
From: HaveHFWillTravel <havhfwilltravel@anyone.net>
Message-ID: <71s4k051a41sooca615k838qdke97hk6lb@4ax.com>
Source record: 89624

somehow to directly connect open feeder to ground rod during non use
periods.
TNX
KG4CYB

3104. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 03:38:21 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <4142762f_2@news1.prserv.net>
Source record: 89625

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:chsrimrol1@newshost.mot.com...
>
> On the Program Apollo ocean ships used for monitoring communications around
> the globe and spacecraft recovery, chain used on parts of the deck railings
> was found to be the source of noise which modulated the multi-Kw HF
> transmitters resulting in degraded Radar performance! I think it initially
> made the radar useless.
>
> --
> Steve N, K,9;d, c. i My email has no u's.

Steve:

That problem investigation was written up in one of the technical journals back then, and I have been trying in vain to
relocate the citation. Do you happen to have it at hand?

--
Crazy George
Remove N O and S P A M imbedded in return address

3105. Re: Suggestions on earth grounding open feeder

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 03:46:54 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Nyu0d.180080$Lj.44871@fed1read03>
Source record: 89627

"HaveHFWillTravel" <havhfwilltravel@anyone.net> wrote in message
news:71s4k051a41sooca615k838qdke97hk6lb@4ax.com...
> somehow to directly connect open feeder to ground rod during non use
> periods.
> TNX
> KG4CYB

First shield-ground the feedline(s) to an external ground at a bulkhead or under-house or next-to-station ground rod. Then:

Take a bulkhead SO-239 connector; screw and solder it to a copper or brass bar so that the center of the connector is filled with solder thru a 1/4" hole from the back. File smooth. Bond that bar to your RF/safety ground system (that nearby ground rod), and before a storm approaches, short the feedline(s) to this ground source. I've gotta add that before you short feedlines to a ground connection *inside* your shack, be sure you have all equipment cases bonded to that ground source via independent single-point connections to that same source, unplug all the equipment from AC power sources, and stay away from the equipment during a thunderstorm!

73,

Jack Painter
Virginia Beach VA

3106. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 03:48:08 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <Yzu0d.681$IX.201@trnddc04>
Source record: 89626

"J. Mc Laughlin" <jcm@power-net.net> wrote in message
news:10k4pji21uqih98@corp.supernews.com...
> A company in FL - well, they might have been blown away by now - called
> something like Pizio Technologies makes VHF bandpass filters from
"crystal"
> elements. Such filters are capable of rejecting adjacent channels in the
> 150 MHz range and are needed in some cities if you have to put a receiver
> downtown.
> As Dale points out, it takes a serious filter indeed to perform what
you
> wish such a filter to perform. On the other hand, I have deliberately
tuned
> some higher end FM broadcast receivers to a weak adjacent station in the
> presence of a fairly strong station to find a bit better than mediocre
> performance. Some receivers have much better filtering than other
> receivers.
> So, as another summery: rotate antenna for best SNR; get a receiver
> with better filtering; and consider a special-made crystal filter if you
> still have a problem. 73 Mac N8TT
>
PTI is definitely still in business and are very capable of building such a
filter- unfortunately in small quantities they are cost prohibitive.

Dale W4OP

3107. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 05:23:41 UTC
From: Craig Buck <k4ia@cox.net>
Message-ID: <EZv0d.19033$aW5.3878@fed1read07>
Source record: 89628

Most of the info I got on linear loading comes from ON4UN's book Low Band Dxing. It is a great source.

The top fed L I am describing is center fed. There is an equal amount of wire on each side of the center insulator.

I just find this solution a whole lot easier than burying 800 feet of wire to make a bottom fed inverted L.

--
Radio K4ia
Craig "Buck"
Fredericksburg, VA USA
FISTS 6702 cc 788 Diamond 64
"Jack Painter" <223bthp@cox.net> wrote in message
news:cfj0d.178414$Lj.153426@fed1read03...
>
> "Craig Buck" <k4ia@cox.net> wrote
>
>> Two big advantages of the center top feed as opposed to bottom end feed
>> is
>> center top requires no radials. Bottom L will need a minimum of 8 100
> foot
>> radials in your application and some would argue you need many more than
> 8.
>> Have fun burying 800+ feet of wire. Second, top feed gets the high
> current
>> radiating part of the antenna up higher. Check out
>> http://www.cebik.com/ltv.html and his discussion of ladder line at
>> http://www.cebik.com/gup/gup32.html. He concludes a 1:1 balun is best.
>>
>> If you have 37 feet of height you can feed at the top and run the wire
>> straight down, back up and then down again for a total of 3x37= 111 feet
> of
>> wire on the vertical side. On the horizontal just bend back at the end
>> or
>> let the end drop down vertically. Sure it will have narrower bandwidth
> than
>> a straight dipole but you have a tuner and you can't have a straight
> dipole.
>> --
>
> Hi Craig, Mr. Cebik says nothing about wrapping radiators back and forth
> near each other as the earlier referenced url:

> http://hamgate.sunyerie.edu/~larc/super_linear_-_loaded_inverted_v.htm
>
> Cebik does comment:
> "Bending the horizontal arm far end down: If horizontal space is limited,
> a
> common practice is to bend (or dangle) the outer ends of a dipole
> downward.
> since the region is the high voltage and low current portion of the
> antenna,
> the radiation pattern is least affected by modifying the geometry." -and-
>
> "Like many wire antennas, the inverted-L will tolerate moderate
> alterations
> of geometry to fit the space available and still yield good, if not peak,
> performance."
>
>> >> > each leg longer. According to Cebik if you can get 3/8s wavelength,
>> >> > you
>> > are
>> >> > very close to the full performance of a half wave. Feeding at the
> top
>> >> > middle does not require a radial field to work.
>
> It doesn't appear that Cebik intended to imply that 3/8~ off-center feed
> would ever approach true1/2~ dipole performance, just that it would still
> operate. These off-center-fed variations (of Carolina Windhams?) are
> confusing, no matter how much wire they use. Remember I don't need an
> all-band compromising performer like the T2FD or Windham, but a specific
> performer on 2182 Khz, and hopefully at least through 4125 Khz. Doing this
> with 70' of horizontal span and two vertical attachment points about 37'
> high is the challenge I am asking for help with. I cannot run anything
> like
> KG&#65533;ZP does, which creates (in his location) a near-field coupling
> nightmare,
> in my opinion. Your suggestion (doubling the verticals), which varies from
> both the KG&#65533;ZP design and Cebik's "moderate geomtery alterations", would
> at
> least add electrical length, but it remains off-center-fed and therefore
> never creates a 1/2~ dipole, correct?
>
> If I stuck with a 1/4~ end-fed L, and only used 8 radials of 20-40', could
> this still outperform an off-center-fed antenna off any length on 2182
> Khz?
>
> Thanks again for the comments and ideas,
>
> Jack painter
> Virginia Beach VA
>

>

3108. Re: Suggestions on earth grounding open feeder

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 05:40:22 UTC
From: CW <"no adddress"@spam>
Message-ID: <PrSdnWsdvJpbEt_cRVn-sg@comcast.com>
Source record: 89629

Switch, bandclamp, duct tape. Take your choice.

"HaveHFWillTravel" <havhfwilltravel@anyone.net> wrote in message
news:71s4k051a41sooca615k838qdke97hk6lb@4ax.com...
> somehow to directly connect open feeder to ground rod during non use
> periods.
> TNX
> KG4CYB

3109. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 08:29:03 UTC
From: DGoncz@aol.com
Message-ID: <5d8971ea.0409110029.362a0f6c@posting.google.com>
Source record: 89630

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<mmavj013s0tfjcau44t6bvjfc26atqbod1@4ax.com>...
> Lower than 88MHz? To what? 550KHz AM?
>
> 73's
> Richard Clark, KB7QHC

Oops. Lower than 88 MHz are TV channels. I forgot that ATC is higher
than 108 MHz. Looked it up in Pocket Ref by Glover.

Doug

3110. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 14:44:50 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <CbE0d.138$iK2.93@lakeread08>
Source record: 89631

"A-Tech" <atech@austin.rr.com> wrote in message
news:ow90d.7798$le.1852@fe2.texas.rr.com...
> Hi,
>
> I am a newbie here and have just dropped in to ask a single technical
> question.
>
>

Try a receiver with decent IF filters. Unfortunately, this might be
hard to do in this day and age, but at one time companies
were using crystal filters in the IF stages that offered some
decent adjacent channel rejection.

Pete

3111. 4NEC2 and ARRL Antenna Modelling Course

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 14:48:56 UTC
From: Thomas <nospam@nospam.com>
Message-ID: <10k642oeodo6p0c@corp.supernews.com>
Source record: 89632

I will be taking the ARRL course

http://www.arrl.org/cce/courses.html#ec004

starting Oct. 1, 2004.

The course outline mentions the use of EZNEC 3.0 or NEC-Win or "or that you are willing to adapt the ideas that we shall explore to the package available to you."

Has anyone taken this course using 4NEC2 by Arie?

Is it reasonable to take this course using software other than that recommended?

Thanks.

Thomas

3112. Re: 4NEC2 and ARRL Antenna Modelling Course

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 15:16:02 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <0didncMDzLMsi97cRVn-oQ@comcast.com>
Source record: 89633

Thomas wrote:

> Has anyone taken this course using 4NEC2 by Arie?

I did.

> Is it reasonable to take this course using software other than that
> recommended?

If you can master the basic use of 4nec2 I don't think you'll have any trouble translating the exercises in the course to Arie's excellent program. I enjoyed using 4nec2 with the course, but a friend who is not as computer savvy had a hard time learning 4nec2 and finally gave up and purchased EZNEC.

73, John NU3E

3113. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 16:10:45 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <9sF0d.8980$ci3.73417@twister.southeast.rr.com>
Source record: 89634

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:chsmo1gjp1@sparta.btinternet.com...
> Jimmie wrote -
>
> > 12 12f t wires, Center ground stake 10 ft long, far end of each wire has
a
> > stake about 3 ft long. These are used more to just hold the wires in
> place.
>
> ==========
>
> Jimmie, For amusement and my education, would you mind letting us have a
few
> more crude details of your ground radial system please.
>
> TYPE OF SOIL
>
> (A) Is it high quality, fertilised garden loam, perhaps very slightly
sandy
> which can grow flowers and shrubs of which you can be proud when you try.
> Perhaps used to be farm or orchard or agricultural land.
>
> (B) Is it slightly gritty, stoney, but ample body which can still make a
> nice flower garden. Quite fertile even though it may be overgrown with
> profuse, dense, robust weeds. (Like mine.)
>
XXXX> (C) Is it sandy, clayey, with small stones or pebbles? Needs
attention with
> fertilisers to grow nice flowers. But a lawn might do very well.
>
> (D) Does it contain stones, sand, grit and small rocks with only 75% of
> good soil but still needs hoeing and weeding to keep looking presentable.?
>
> (E) Is it poor soil, smewhat infertile, difficult to manage as a flower
> garden? Could be turned into a rock garden. Even the weeds don't do very
> well.
>
> (F) Thin layer of mediocre soil over bedrock.
>
> MOISTURE CONTENT
>
> (G) Fairly wet.
> (H) Nicely moist.
X> (I) Slightly damp.

> (J) Well drained, dry.
> (K) Dusty.
> (L) Arid.
>
> ROUGH DEPTH OF WIRE BURIAL.
1 inch

> In tenths of an inch if very shallow.
> Zero if just trodden in, in good contact with soil surface.
>
> Thank you.
> ----
> Reg.
>
>
Soil is kind of a strang brew. when the house was built there was quite a hill here that was leveled off. When the top soil was put back they put down the top soil with about a foot of clay over it. So I have a foot of clay a foot or so of top soil and more clay. Top layer of clay can get faily dry while the layer of topsoil and underlying clay stay fairly moist. Grass and trees grow fairl well and I never have to water them. Sometimes the grass browns when we have drought conditions but the fruit trees always seem to do well. I susppect this is because they can reach the underlying moisture.

3114. Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 16:47:00 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <qva6k096gk648gim1afeftq948aaib8tvv@4ax.com>
Source record: 89635

Hi Reg,

This msg is a repeat of my last post for you in the TLI thread in case you missed it.

"Another subject.: I'm wondering if I have your correct email address. During the past two years, or more, I've sent you several emails with no response. Yet you responded to my posts on this rraa in a cordial and friendly manner. In one of my emails I asked if I had said something that offended you so that I could apologize, but no response. During a cruise on the North and Baltic Seas two years ago I was in London at both the beginning and end of the cruise. I emailed you twice while in London and three times from the ship, asking for your phone number so I talk with you to learn how to find you for a visit.

I first used the address you show on your posts with the 'zzz', but it came back--wrong address. I then used your address without the 'zzz' with no response. Can you help me understand what went wrong, because I really wanted to meet you while in England.

Walt

3115. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 17:05:59 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <YfG0d.187135$Lj.144519@fed1read03>
Source record: 89636

" Uncle Peter" <radioconnectionNO@cox.netSPAM> wrote in message
news:CbE0d.138$iK2.93@lakeread08...
>
> ">
> Try a receiver with decent IF filters. Unfortunately, this might be
> hard to do in this day and age, but at one time companies
> were using crystal filters in the IF stages that offered some
> decent adjacent channel rejection.
>
> Pete
>
>
I should add other than phased stacked antennas to null
the unwanted station, there is really no practical filter you
can use to notch an adjacent FM channel. A custom
crystal filter might do it, but that's many hundreds of
dollars. It's far easier and cheaper to do this sort of
filtering at the first IF. It might be easier to retrofit the
receiver with a good IF filter as compared to trying to
notch the undesired signal or bandpass the desired
signals at the operating frequencies.

Pete

3116. Re: Wizard Radio in Seven Corners, VA, to receive WHFS in Annapolis-followup

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 17:06:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gub6k09n37o32kivpeoii0deon9ifdnqm4@4ax.com>
Source record: 89637

On 11 Sep 2004 01:29:03 -0700, DGoncz@aol.com (Doug Goncz) wrote:

>Oops. Lower than 88 MHz are TV channels. I forgot that ATC is higher
>than 108 MHz. Looked it up in Pocket Ref by Glover.

Hi Doug,

By ATC, I thought you were talking about NPR's All Things Considered.
Now I suppose you are talking about Air Traffic Control(?). If so, an
FM receiver is going to have a difficult job with AM transmissions.

73's
Richard Clark, KB7QHC

3117. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 17:31:51 UTC
From: Doc <ltdoc@yahoo.com>
Message-ID: <mEG0d.70$tu2.8101@sooner.brightok.net>
Source record: 89638

Jack,
It's certainly worth a try as a receiving antenna. Using it to transmit will probably be a different story altogether! Along with all the other comments, just remember that those fences probably get very close to your neighbor's houses (and electonic devices). You wouldn't believe the complaints I got when doing something simular! LOL
'Doc

3118. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 18:23:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ild6k01obc5h24hmkho5890tc420nsegaa@4ax.com>
Source record: 89639

On Fri, 10 Sep 2004 14:25:15 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>
>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>news:9oh1k0pqq4pam1opuvr5t1637bt41sf1fm@4ax.com...
>> On Thu, 09 Sep 2004 19:42:41 GMT, "Jimmie" <Gfender@carolina.rr.com>
>> wrote:
>>
>> >This equates to about 40 ohms
>> >impedance seen at the antenna base. This also agrees with my antenna
>> >analyzer. Antenna is a full length 1/4 wl antenna on 20m. I was figuring
>37
>> >or soo for this.

>
>12 12f t wires, Center ground stake 10 ft long, far end of each wire has a
>stake about 3 ft long. These are used more to just hold the wires in place.

Hi Jimmie,

My last post responding to this included a mistaken analysis. I had
picked up the sample vertical and did not notice it was using MININEC
ground, which is unsuitable for this question.

On using the particulars you supply above, the results are very much
different.

With the default ground (0.005/13):
Impedance = 57.96 + J 0.1116 ohms

With extremely poor ground (0.001/3):
Impedance = 65.24 - J 0.1441 ohms
SWR (50 ohm system) = 1.305

With poor ground (0.002/13):
Impedance = 55.64 + J 0.1153 ohms
SWR (50 ohm system) = 1.113

With "Pastoral" ground (0.01/14)
Impedance = 56.62 + J 0.1475 ohms
SWR (50 ohm system) = 1.132

With very good ground (0.0303/20)
Impedance = 54.38 + J 0.3596 ohms
SWR (50 ohm system) = 1.088

For each change of ground I drove out reactance by trimming the
radiatior to

3119. Antenna Design Book

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 19:29:48 UTC
From: Matt <nospam.hciss@yahoo.com>
Message-ID: <10k6kg73d5u4gf7@corp.supernews.com>
Source record: 89640

Can anyone recommend a hobbyist antenna design book that covers some basic designs in 900Mhz, 2.4Ghz and 5.8Ghz bands?

Matt

3120. Re: Suggestions on earth grounding open feeder

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 19:40:37 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <ovk6k01h7h09punvc0urtcn2mvad54ahvq@4ax.com>
Source record: 89641

On Sat, 11 Sep 2004 03:27:31 GMT, HaveHFWillTravel
<havhfwilltravel@anyone.net> wrote:

>somehow to directly connect open feeder to ground rod during non use
>periods.
>TNX
>KG4CYB

You can check the Wireman's spark plug apparatus for balanced line at
http://thewireman.com/ground.html#878
or do what I do -- just disconnect the line outside the window with
banana plugs when the sky gets dark.

bob
k5qwg

3121. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 19:51:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4ig6k0du3mojfkjqtn15pnm23slnvrjlkh@4ax.com>
Source record: 89642

On Fri, 10 Sep 2004 14:25:15 GMT, "Jimmie" <Gfender@carolina.rr.com>
wrote:

>
>"Richard Clark" <kb7qhc@comcast.net> wrote in message
>news:9oh1k0pqq4pam1opuvr5t1637bt41sf1fm@4ax.com...
>> On Thu, 09 Sep 2004 19:42:41 GMT, "Jimmie" <Gfender@carolina.rr.com>
>> wrote:
>>
>> >This equates to about 40 ohms
>> >impedance seen at the antenna base. This also agrees with my antenna
>> >analyzer. Antenna is a full length 1/4 wl antenna on 20m. I was figuring
>37
>> >or soo for this.

>
>12 12f t wires, Center ground stake 10 ft long, far end of each wire has a
>stake about 3 ft long. These are used more to just hold the wires in place.

Hi Jimmie,

My last post responding to this included a mistaken analysis. However,
it has been now thrice plagued. Originally I had picked up the sample
vertical and did not notice it was using MININEC ground, which is
unsuitable for this question. Then in doing the suite of grounds, I
had truncated the radials by half in a frequency translation. Then I
fumbled the wrong key -sigh-

On using the particulars you supply above, the results offer the low
end of ground resistance by your estimate. However this depends on
several things (not surprisingly - ground). Does your analyzer read
real resistance, or simply SWR? What does it read with a 50 Ohm
resistor (taking the average of several, all with close trimmed
leads)?

Anyway, by your SWR reading it appears your situation corresponds to
an "extremely poor ground." Curious thing about the nature of
"extremely poor," is that what does this mean? There is every
indication that it offers the least loss, and yet it also offers the
poorest signal out (at 10ï¿½ as an indicator of DX).

With extremely poor ground (0.001/3 Zground = 209 Ohms):
Impedance = 39.46 + J 0.234 Ohms
SWR (50 ohm system) = 1.267
-6.01 dBi @ 10ï¿½

With poor ground (0.002/13 Zground = 104 Ohms):
Impedance = 42.34 + J 0.1014 Ohms
SWR (50 ohm system) = 1.181
-3.25 dBi @ 10ï¿½

With the default ground (0.005/13 Zground = 99 Ohms):
Impedance = 43.64 + J 0.03538 Ohms
SWR (50 ohm system) = 1.146
-3.36 dBi @ 10ï¿½

With "Pastoral" ground (0.01/14 Zground = 87 Ohms)
Impedance = 44.93 + J 0.515 Ohms
SWR (50 ohm system) = 1.113
-3.00 dBi @ 10ï¿½

With very good ground (0.0303/20 Zground = 57 Ohms):
Impedance = 44.5 + J 0.3779 Ohms
SWR (50 ohm system) = 1.124
-1.11 dBi @ 10ï¿½

For each change of ground I drove out reactance to less than one Ohm
by trimming the radiator to what you describe as a full size
quarterwave antenna.

Going back to the nature of ground, we return to the descriptions of
conductivity and how a "very good" conducting soil is NOT what you
want nearby in terms of matching. A "very good" conducting soil is
injecting several ohms more resistance into your feed than an
"extremely poor" quality soil. However, when we consider the Z of
ground, we observe that it is the ratio of this impedance to the ï¿½ther
that is the better indicator of achieving good low angle launch
characteristics. Consistent here are the SWR of 6.6 for "very good"
soil compared to the SWR of 1.8 for "extremely poor" soil.

There is less conductive loss (but more capture of power) in the
"extremely poor" soil and there is more conductive loss (but less
capture of power) in the "very good" soil. Clearly it is the
REFLECTIVE attributes of the media interface that is the more
compelling characteristic than with the so-called boon of
conductivity.

Two more points of practical consideration here:
1. With 12 radials laid out as you have, there is very little
variation over "average" grounds (no point in trying harder);
2. The DX angle is driven by ground characteristics many wavelengths
out (no point in worrying about ground either way).

73's
Richard Clark, KB7QHC

3122. Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 20:14:28 UTC
From: John Harper AE5X <john@ae5x.com>
Message-ID: <E0J0d.24935$bE1.12741323@news4.srv.hcvlny.cv.net>
Source record: 89643

I have a BBC audio file (17M, about 28 minutes) on amateur radio operations
in NYC my website for anyone interested.

--

John Harper AE5X
Outdoor QRP: http://www.ae5x.com

3123. Re: Ladder line with end fed wire

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 20:16:12 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2qh4lhFvjdnfU1@uni-berlin.de>
Source record: 89644

```
"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:2qakiaFt4c6rU1@uni-berlin.de...
>
> Best I could do:
>
> 10m 10m
> ------------------------------------------------
> | |
> | pole on house
> | 10m
> |
> |
> x feed
>
> back garden front garden
>

or even better perhaps:

10m 10m
------------------------x------------------------
| | feed |
| pole on house |
| 6m | 6m
| |
| |

back garden front garden

Getting G5RV-ish now. Not that great for 160 though.
```

3124. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 20:29:52 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <chvn80$917$1@titan.btinternet.com>
Source record: 89645

My dear Walt,

I have so many messages on my screen that some are being displayed as "no longer available". Fortuately I did find your appeal amongst them. Anyway, I shall now delete the lot and start again with a clean slate.

Over the years I have been aware of some of your communications. On one occasion I received a parcel of your papers, which I think you also sent to other people, for which, if I remember correctly, I briefly thanked you for.

On another occasion you said you would be visiting Europe and it would be possible for you to visit me. Not being the best of sociable people (an admitted personal handicap) and not being in the best of health to receive visitors at the time I'm sorry I did not take the possibility sufficiently seriously.

I am still not in the best of health and never will be. On the other hand I do not expect to pass into the next world in the immediate future. Its just old age. But I still have my wits about me.

And I can express myself well in plain old English without having to revert to the subject of Boston Tea Parties. And beginning a sentence with 'and' is perfectly legitimate.

So Walt, what's on your mind? If you would like to discuss things in public it's OK by me.

What about "The Conjugate Match".

(Believe me, it took several minutes to recollect the name of what sort of match it is. But perhaps that's because I'm 3 parts of the way down down a bottle of European Rumanian Red. I hasten to add I have no intention of neglecting the excellent Californian varieties.)

Yours sincerely, Reg, G4FGQ

==========

"Walter Maxwell" <w2du@iag.net> wrote in message
news:qva6k096gk648gim1afeftq948aaib8tvv@4ax.com...
> Hi Reg,
>
> This msg is a repeat of my last post for you in the TLI thread in case you
> missed it.
>
> "Another subject.: I'm wondering if I have your correct email address.
During

> the past two years, or more, I've sent you several emails with no
response. Yet
> you responded to my posts on this rraa in a cordial and friendly manner.
In one
> of my emails I asked if I had said something that offended you so that I
could
> apologize, but no response. During a cruise on the North and Baltic Seas
two
> years ago I was in London at both the beginning and end of the cruise. I
emailed
> you twice while in London and three times from the ship, asking for your
phone
> number so I talk with you to learn how to find you for a visit.
>
> I first used the address you show on your posts with the 'zzz', but it
came
> back--wrong address. I then used your address without the 'zzz' with no
> response. Can you help me understand what went wrong, because I really
wanted to
> meet you while in England.
>
> Walt
>
>

3125. Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 21:33:29 UTC
From: Ger <gerdalt999@hotmail.com>
Message-ID: <5aK0d.27063$Z14.9247@news.indigo.ie>
Source record: 89646

Apologies in advance but this seems like a real dumb question.
I have cable TV and with it cable FM radio in my home.
I listen to FM radio on my home stereo unit with the FM coax radio signal plugged in the back!
Perfect reception.
Now, I am the proud new owner of a kitchen type portable FM radio receiver.
But the portable has no aerial co-ax socket at the back - just rabbit ears.
Is there any way I can get quality FM reception on the portable using my cable coax connection?
I am prepared to take the back off and do some soldering!!
In hope
Ger

3126. Supporting 450 ohm feeders across an open area

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 22:00:51 UTC
From: t_ashland@yahoo.com
Message-ID: <6e6aeba9.0409111400.4bec26fb@posting.google.com>
Source record: 89647

I am looking for a way to run 450 ohm wire to a tower approximately 50 feet away from the shack. The tower is only 32 feet high, but I plan on doing one of Cebik's (or is it Cecil's) rotatable 44 foot dipoles fed with open wire feeders. I'm wondering what some of you have done to support a run of open wire feeders to stop it from flopping in the wind. Thread some rope through the windows of the feed line? Thanks.

3127. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 22:09:52 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <8tt6k0t9uo8phqu12b564g1h6uib40ma76@4ax.com>
Source record: 89648

On Sat, 11 Sep 2004 20:29:52 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>snip

>So Walt, what's on your mind? If you would like to discuss things in public
>it's OK by me.

Well, Reg, what has been on my mind for a long time is whether I was getting to you with the correct email address. It's gratifying to learn that I have.

I am indeed sorry to learn of your disability, and understand why visitors would cause you discomfort. However, if on chance I'm able to visit your marvelous UK again I'll at least call you on the phone. I must tell you that Peter, G3WIX answered my post, and gave me your number, which I'll be sure to have with me.

My regret while in the UK is that the time was too short, because I would have liked to see more of it than one day in London. I'd lke to avoid Heathow next time, though. Took a taxi two hours get out of it. There are several other UK hams that I'd like to see. In addition, my ancestors blew in from Scotland in the late 1700's, so I'd like to go to Glasgow and research to see how far I can go back.

I'll need to refresh my knowledge of the location of JC Maxwell's museum (think it's Edinburgh) to go there and see his ancestral line to determine if any of his parallel mine. Wouldn't it be neat if I could say a micro amount of his knowledge rubbed off on me?

So Reg, just when you least expect it, you may get a jingle from me sometime. I'll be sure to have a goblet of the appropriate spirits in hand that we can clink when I call.

Walt

3128. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 22:55:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <eb07k0tv12m2v1vhtmodagctbgjs8pduu6@4ax.com>
Source record: 89649

On Sat, 11 Sep 2004 22:33:29 +0100, "Ger" <gerdalt999@hotmail.com>
wrote:

>Apologies in advance but this seems like a real dumb question.
>I have cable TV and with it cable FM radio in my home.
>I listen to FM radio on my home stereo unit with the FM coax radio signal
>plugged in the back!
>Perfect reception.
>Now, I am the proud new owner of a kitchen type portable FM radio receiver.
>But the portable has no aerial co-ax socket at the back - just rabbit ears.
>Is there any way I can get quality FM reception on the portable using my
>cable coax connection?
>I am prepared to take the back off and do some soldering!!
>In hope
>Ger

Hi Ger,

Go to radioshack and get a 300 Ohm to 75 Ohm TV adapter. The 300 Ohm
side is with the free leads. Cut off the leads and replace with
alligator clips. Connect clips to FM antenna rabbit ears (I presume
you were literal with their being two) and connect a standard cable
between the adapter and a cable outlet.

73's
Richard Clark, KB7QHC

3129. Re: Supporting 450 ohm feeders across an open area

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-11 23:58:42 UTC
From: Doc <ltdoc@yahoo.com>
Message-ID: <TiM0d.72$tu2.8407@sooner.brightok.net>
Source record: 89650

Terry,
Ever seen the 'ribbon' type banners? When you do, you'll notice they are twisted to
form sort of a spiral. Part of the reason is because the 'spiral' sort of averages the
ribbon's cross-area over a long span. Do the same with your ladder line, twist it. It'll
still flop around a little but nothing like a straight run of it will.
How to support it over a 50 foot span? Depending on the size of conductors used,
it ought to support it's self. There's no real need for large conductors, either. A #18
hard drawn copper wire will support much more than it's own weight. Shouldn't be a
problem unless you hhappen to get some very high winds...
'Doc

3130. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 00:42:36 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41439b7c$0$74187$39cecf19@news.twtelecom.net>
Source record: 89651

If done like Chaska MN, it would be using 1 watt 802.11G transmitters
with 6 dBd vertically polarized antennas. The system is a mesh network
fed from relatively few points. These systems transmit only when
traffic needs to be passed. The density varies from about 8 to 20
transmitters per square mile from what I've been told by the city.

I have heard of no complaints from weak signal 1296 users in the area,
and I am a member of the local VHF/UHF/uwave club.

tom
K0TAR

Bob Miller wrote:

> Philadelphia is considering a wireless Internet system that would
> blanket the entire city via hundreds of small transmitters.
>
> See
> http://news.yahoo.com/news?tmpl=story&cid=562&u=/ap/20040901/ap_on_hi_te/wireless_cities
_7&printer=1
>
> Would this interfere with ham radio?
>
> Sounds like a possible nice alternative to BPL :-)
>
> Bob
> k5qwg
>

3131. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 00:45:37 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41439c31$0$74187$39cecf19@news.twtelecom.net>
Source record: 89652

Oops, I meant 2.4 gigs.

tom
K0TAR

Bob Miller wrote:

> Philadelphia is considering a wireless Internet system that would
> blanket the entire city via hundreds of small transmitters.
>
> See
> http://news.yahoo.com/news?tmpl=story&cid=562&u=/ap/20040901/ap_on_hi_te/wireless_cities_7&printer=1
>
> Would this interfere with ham radio?
>
> Sounds like a possible nice alternative to BPL :-)
>
> Bob
> k5qwg
>

3132. Re: For women:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 01:10:01 UTC
From: whoever <whoever@wherever>
Message-ID: <1c-dnd1KcfloPN7cRVn-hA@centurytel.net>
Source record: 89653
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

So how many members are there now? Is it for woman only?
Not to be rude but I wonder if it would be legal to have a group called
" AmateurRadiomen" ;)
Good luck with your new group!

Popcorn Lover wrote:

> http://groups.yahoo.com/group/AmateurRadioWomen
>
>
>

3133. Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 01:49:26 UTC
From: kc7jfv@hotmail.com
Message-ID: <781c67d2.0409111749.72e61a30@posting.google.com>
Source record: 89654

I know this is amateur group but I thought you guys will have some answer.
Got a unused TV yagi antenna with about 12 directors, dipole, and a reflector.
Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do I need to
hook up a balun? If yes, would a 75 ohm be good enough? OR should I just forget
about this plan? TIA.

3134. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 02:00:15 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4143adaf$0$91008$39cecf19@news.twtelecom.net>
Source record: 89655

Depending on the antenna it will work well or not so well, but still may
cover VHF aircraft. A 300 to 75 balun should be fine, assuming the
antenna uses a 300 ohm balanced feed.

And aircraft antennas tend to be vertical, at least the ones on the
ground, so orient it that way.

tom
K0TAR

Jim wrote:

> I know this is amateur group but I thought you guys will have some answer.
> Got a unused TV yagi antenna with about 12 directors, dipole, and a reflector.
> Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do I need to
> hook up a balun? If yes, would a 75 ohm be good enough? OR should I just forget
> about this plan? TIA.

3135. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 02:11:36 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci0b8o$ec2$1@hercules.btinternet.com>
Source record: 89656

My phone number is 021-561-4959 and is unlikely to change. But what you may find as a result of a wecome call is anybody's guess.

I can well understand your interest in J.C.Maxwell's history. The Scots family was not very large. It is fairly likely you have connections. Should you enquire further then, as perhaps you have already found, a google on "Maxwell" is a good starting point. At the age of 13 he had already established mimself as a budding genius. His professional career is well documented.

But I can't resist the opportunity to add, it was Heaviside's self-taught nathematics which taught the world how to understand radio waves in all the world's text books.

I think serious family research work would have to begin at home in the States. A visit to Edinburgh would be more profitable than a vist to London during a holiday visit.

Another visit to a high-class tailor whilst in Edinburgh on holiday would eventually fit you up with a genuine Maxwell tartaned kilt. I expect you know that a kilt is a heavy, pleated, woven skirt, with a sporan to contain your loose cash, under which is nothing in the way of clothing. Many Scotsmen still wear them and not on ceremonial occsions. Furthermore, Scotswomen are proud to be so accompanied.

Yours, Reg, G4FGQ

3136. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 05:41:37 UTC
From: richardharrison@webtv.net
Message-ID: <16820-4143E191-850@storefull-3255.bay.webtv.net>
Source record: 89657

Tom, K0TAR wrote:
"And aircraft antennas tend to be vertical, at least the ones on the ground, so orient it that way."

Of course, aircraft need to communicate in all directions around, so vertical polarization makes sense.

In level flight, VHF aircraft antennas tend to be vertical. See the submarine Pampanito (at dock in San Francisco as a museum) web page for SCR 522 specifications. This was an AM VHF radio used in many warplanes in WW-2. It was supplied with a "1/4-wave vertical antenna". AM and the VHF frequencies above today`s FM broadcast band, and below the 2-meter amateur band, are still used for aircraft radio traffic.

Best regards, Richard Harrison, KB5WZI

3137. Re: wireless networks/ham radio interference ??

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 06:20:49 UTC
From: richardharrison@webtv.net
Message-ID: <12008-4143EAC1-1@storefull-3255.bay.webtv.net>
Source record: 89658

Reg, G4FGQ wrote:
"---the result of deliberate poisoning and bombing by a country which imagines itself, not unsurprisingly, to have international enemies."

If the French had despensed their responsibilities in French Indo-China properly, there would have been no danger of an iterative collapse of dominoes to communism in the region. The U.S. would not have offered help to a corrupt anticommunist regime which squandered the help it received.

The tragedy reminds me of the old story of the knight who hurries home to report to his king that he has slain or subdued all of the king`s enemies in a neighboring kingdom. The king replies that he has no enemies in the neighboring kingdom. The knight corrects the king by saying, "You do now sir!"

Best regards, Richard Harrison, KB5WZI

3138. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 11:00:30 UTC
From: Ger <gerdalt999@hotmail.com>
Message-ID: <TZV0d.27094$Z14.9271@news.indigo.ie>
Source record: 89659

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:eb07k0tv12m2v1vhtmodagctbgjs8pduu6@4ax.com...
> On Sat, 11 Sep 2004 22:33:29 +0100, "Ger" <gerdalt999@hotmail.com>
> wrote:
>
> >Apologies in advance but this seems like a real dumb question.
> >I have cable TV and with it cable FM radio in my home.
> >I listen to FM radio on my home stereo unit with the FM coax radio signal
> >plugged in the back!
> >Perfect reception.
> >Now, I am the proud new owner of a kitchen type portable FM radio
receiver.
> >But the portable has no aerial co-ax socket at the back - just rabbit
ears.
> >Is there any way I can get quality FM reception on the portable using my
> >cable coax connection?
> >I am prepared to take the back off and do some soldering!!
> >In hope
> >Ger
>
> Hi Ger,
>
> Go to radioshack and get a 300 Ohm to 75 Ohm TV adapter. The 300 Ohm
> side is with the free leads. Cut off the leads and replace with
> alligator clips. Connect clips to FM antenna rabbit ears (I presume
> you were literal with their being two) and connect a standard cable
> between the adapter and a cable outlet.
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
In the case where the aerial is just one extending 'pole', what do I do?
(I have two portable radios -one with a telescopic pole and the other with
dual ears))
Many thanks for your help
Ger

3139. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 11:25:00 UTC
From: Doc <ltdoc@yahoo.com>
Message-ID: <imW0d.73$tu2.8757@sooner.brightok.net>
Source record: 89660

Ger,
You should be able to add an external antenna to your new radio
but don't expect 'perfect' reception of other than local stations. I'm
afraid reception would never be as good as on the 'cable', but that
doesn't mean it won't/can't be pretty good. A 'closed circuit' system
like the cable will always be 'better' than broadcast reception.
'Doc

3140. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 13:23:23 UTC
From: JC Maxwell <ImStillAlive29863@Hotmail.com>
Message-ID: <41444dcd@post.usenet.com>
Source record: 89661

**** Post for FREE via your newsreader at post.usenet.com ****

"Reg Edwards"
> I can well understand your interest in J.C.Maxwell's history.

http://www.sonnetusa.com/bio/maxwell.asp

Above webpage includes a link where one can download a .pdf file of an
e-copy of an old (copyright expired, for the original book) biography of JC
Maxwell.

It's a fairly big file, so don't everyone download it at once.

-=-=-=

3141. Re: More W8JI "wisdom"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 15:06:39 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040912110639.29586.00000360@mb-m02.aol.com>
Source record: 89662

>
>"On a different note Yuri, what's new with the transceiver??
>Dale W4OP
>
>
Sorry about delay, had hard drive crash, slowly recovering.

We should change the subject, or W8JI will take credit for it :-)

Mechanical packaging done, also simpler version of Baby DRone is done, I am putting picture of it on the web. Farming out the cases and PS manufacturing. Working on fine tuning the architecture and gathering requirements for features. Had SM5BSZ of Linrad fame here and did some work on circuit design. Coming along nicely. Just had hard drive crash (IBM) after telling everybody to back up, while being lazy to do it myself. :-(
Enjoying working with nuts and volts, they don't argue with me, just some times don't work as they supposed to, but that usually can be fixed while some people have much higher resistance (or loss :-)
Stay tuned, coming soon to your shack.

73 Yuri

3142. Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 15:41:20 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <w6_0d.18827$w_6.11062@fe37.usenetserver.com>
Source record: 89663

I was having a discussion with another ham about dipoles and dipole lengths, and a rather silly question came up that neither one of us was sure of the answer. If a dipole is using INSULATED wire, can the electrical length be altered by just wrapping the ends more or less around the antenna wire when attaching the end insulator? Or does the INSULATED wire need to be cut? He thinks it does shorten the dipole, I say it doesn't. Hope he is right, it makes 'pruning' dipoles a lot easier.

Thanks

--

****
Jim & Pat Leder
http://home.fuse.net/k8cxm
****

3143. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 16:00:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l9s8k097bo8h86q1b3j9ck63pcfnu4pumt@4ax.com>
Source record: 89664

On Sun, 12 Sep 2004 12:00:30 +0100, "Ger" <gerdalt999@hotmail.com>
wrote:
>In the case where the aerial is just one extending 'pole', what do I do?

Hi Ger,

Go to radioshack and get a 300 Ohm to 75 Ohm TV adapter. The 300 Ohm
side is with the free leads. Cut off the leads and with extra wire
connect the ends together in a large loop (about 1 meter around). Put
receiver inside middle of loop.

73's
Richard Clark, KB7QHC

3144. Re: For women:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 16:17:13 UTC
From: CW <"no adddress"@spam>
Message-ID: <FI6dncefyOQU69ncRVn-gw@comcast.com>
Source record: 89665
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"whoever" <whoever@wherever> wrote in message
news:1c-dnd1KcfloPN7cRVn-hA@centurytel.net...
> Not to be rude but I wonder if it would be legal to have a group called
> " AmateurRadiomen" ;)
Of course. Why wouldn't it be?

3145. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 16:24:29 UTC
From: CW <"no adddress"@spam>
Message-ID: <yNCdnZ8h07uj5dncRVn-tQ@comcast.com>
Source record: 89666

How so? It's on topic. If this is the one I'm thinking of, it is a recording of a BBC radio spot on the role of amateur radio operations during the World Trade Center emergency.

"Bill Turner" <noway@nohow.com> wrote in message news:cbm8k098gitl659fh9vellb39o0cvt5055@4ax.com...
> On Sat, 11 Sep 2004 20:14:28 GMT, "John Harper AE5X" <john@ae5x.com>
> wrote:
>
> >I have a BBC audio file (17M, about 28 minutes) on amateur radio operations
> >in NYC my website for anyone interested.
>
> --
>
> Spam.
>
> --
> Bill W6WRT
>

3146. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 16:27:26 UTC
From: CW <"no adddress"@spam>
Message-ID: <j_CdnT5UkKBz5dncRVn-rg@comcast.com>
Source record: 89667

The link is broken.

"John Harper AE5X" <john@ae5x.com> wrote in message
news:E0J0d.24935$bE1.12741323@news4.srv.hcvlny.cv.net...
> I have a BBC audio file (17M, about 28 minutes) on amateur radio
operations
> in NYC my website for anyone interested.
>
> --
>
> John Harper AE5X
> Outdoor QRP: http://www.ae5x.com
>
>
>

3147. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 16:31:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci1tkg$k2$1@hercules.btinternet.com>
Source record: 89668

I have lost all previous contributions to this thread.

But Jimmie gave the description of his radial system -
> >
> >12 12f t wires, Center ground stake 10 ft long, far end of each wire has
a
> >stake about 3 ft long. These are used more to just hold the wires in
place.
>
plus a brief description of type of soil and moisture content. I guessed at
wire diameters.

From which I deduce the following input impedances -

AT 1.9 MHz AT 7.0 MHz
---------- ----------
10 + j0 13 + j11 ohms.

Uncertainty = +/- 3 ohms which is adequate for the intended purpose.

The above figures have been obtained using programs ENDFEED and RADIALS2
(two different modelling methods) and averaging the results at soil
resistivities of 100 and 300 ohm metres. Programs can be downloaded in a
few seconds from website below. Calculating time no longer than needed to
enter the simple data.

In practice, only the resistances matter because the reactances are tuned
out simultaneously with the antenna, equivalent to minor readjustments of
the tuner. The resistance values, in conjunction with calculated radiation
resistance can be used to calculate radiating efficiency.

If Jimmie should ever measure input resistance with similar uncertainty (not
too difficult) then I should be pleased to hear his results.

.....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

3148. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 16:59:58 UTC
From: CW <"no adddress"@spam>
Message-ID: <E-GdnbREDfQTHdncRVn-hw@comcast.com>
Source record: 89669

I have never seen a 2010 so don't know what kind of inputs it has. If it has balanced inputs, connect the feedline directly to it. If, as I suspect, it has an unbalanced coax connector, use the 75 ohm balun.

"Jim" <kc7jfv@hotmail.com> wrote in message news:781c67d2.0409111749.72e61a30@posting.google.com...
> I know this is amateur group but I thought you guys will have some answer.
> Got a unused TV yagi antenna with about 12 directors, dipole, and a reflector.
> Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do I need to
> hook up a balun? If yes, would a 75 ohm be good enough? OR should I just forget
> about this plan? TIA.

3149. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:01:04 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409120901.6f8fc49c@posting.google.com>
Source record: 89670

Great, so I start my computor and click what to get started when I find exe ?
Art

Kingfish <nospam@nospam.net> wrote in message
news:<g10ij0l9d94sqj3j3vr82tkf3419oe20u8@4ax.com>...
> I use several DOS programs that run perfectly in XP. XP is based on
> the NT Kernel, therefore, the 'DOS' that you actually see, is merely
> an emulation. By right clicking the .exe, selecting Properties and
> selecting Compatibility Mode under the Compatibility tab, you can
> probably run most anything you want. At lease I have found this to be
> the case.
> Kingfish
>
> On Fri, 03 Sep 2004 20:27:32 GMT, "aunwin" <aunwin@insightbb.com>
> wrote:
>
> >This thread is of interest to me in that I like many others have antenna
> >programs in DOS
> >Now all computors sare sold with Windows XP which has no provision for dos
> >Now many programs shown on the given page are also written in DOS and
> >loosely
> >describe that it is to be used with a 32 bit console program mode. But there
> >does not seem to be any specifics
> >about this or where it can be obtained ,which leads me to think of
> >discarding all the newer window programs
> >and backtrack to Windows 98.
> >So for a newcomer it is not all that simple as compatability is not ensured
> >when one has a computor
> > that is four years old or newer.
> >It also begs the question why, as processors become faster ,one backtracks
> >by using "32 bits".
> >Thus the thread initiator has to step carefully to ensure that the program
> >chosen is compatable
> >and useable with XP program which now appears to be the choice of today, and
> >not have to tread though a
> >range of additional interface additions.
> >Art
> >
> >
> >
> >
> >"Ray Anderson" <reanderson@sbcglobal.net> wrote in message
> >news:ruSZc.15231$tI4.12587@newssvr29.news.prodigy.com...
> >> Thomas wrote:

> >>
> >> >
> >> > What about free versions of the NEC code?
> >> >
> >> > I am interested in modeling a helically wound antenna and so need a lot
> >> > of segments.
> >> >
> >> > Thanks.
> >> >
> >> > Thomas
> >>
> >> For free packages, I find the 4nec2 program amongst the most powerful
> >> and easy to use. You can download it from the NEC Archives at
> >> http://www.qsl.net/wb6tpu/swindex.html
> >>
> >> It has most, if not all, of the features of many of the commercial
> >> packages plus a few that they don't have. I believe the NEC2 engine
> >> underlying the gui is set up to handle up to 11,000 segments.
> >>
> >>
> >> -Ray WB6TPU
> >

3150. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:09:05 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <Uo%0d.116384$0o5.74527@bignews1.bellsouth.net>
Source record: 89571

Simplest way is to just thread the wire thru the insulator and and twist the ends together. Since a dipole never (well, rarely) comes out exactly right anyway, you're gonna end up pruning/lengthening it anyhow. If you do twist the wire back thru the insulator, yes, it will affect the length. If you are talking about cutting the internal (radiating element) wire SHORTER than the insulation, that doesn't make sense; the insulation is not strong enough to hold the thing. So, just thread the wire thru the insulator and twist the ends back onto itself. Then prune/lengthen as needed to resonate.

73

K4KWH
"Jim Leder" <k8cxm@hotmail.com> wrote in message
news:w6_0d.18827$w_6.11062@fe37.usenetserver.com...
> I was having a discussion with another ham about dipoles and dipole
> lengths, and a rather silly question came up that neither one of us was
sure
> of the answer. If a dipole is using INSULATED wire, can the electrical
> length be altered by just wrapping the ends more or less around the
antenna
> wire when attaching the end insulator? Or does the INSULATED wire need to
be
> cut? He thinks it does shorten the dipole, I say it doesn't. Hope he is
> right, it makes 'pruning' dipoles a lot easier.
>
> Thanks
>
> --
>
> **********
> Jim & Pat Leder
> http://home.fuse.net/k8cxm
> **********
>
>
>

3151. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:12:37 UTC
From: CW <"no adddress"@spam>
Message-ID: <ir-dnXtuFeIYHtncRVn-qg@comcast.com>
Source record: 89572

I got the impression that he was looking to use the antenna for FM
broadcast. Where did the aircraft come from?

"Tom Ring" <news0000@taring.org> wrote in message
news:4143adaf$0$91008$39cecf19@news.twtelecom.net...
> Depending on the antenna it will work well or not so well, but still may
> cover VHF aircraft. A 300 to 75 balun should be fine, assuming the
> antenna uses a 300 ohm balanced feed.
>
> And aircraft antennas tend to be vertical, at least the ones on the
> ground, so orient it that way.
>
> tom
> K0TAR
>
> Jim wrote:
>
> > I know this is amateur group but I thought you guys will have some
answer.
> > Got a unused TV yagi antenna with about 12 directors, dipole, and a
reflector.
> > Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do I
need to
> > hook up a balun? If yes, would a 75 ohm be good enough? OR should I
just forget
> > about this plan? TIA.

3152. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:24:05 UTC
From: Ger <gerdalt999@hotmail.com>
Message-ID: <nB%0d.27108$Z14.9095@news.indigo.ie>
Source record: 89573

"Doc" <ltdoc@yahoo.com> wrote in message
news:imW0d.73$tu2.8757@sooner.brightok.net...
> Ger,
> You should be able to add an external antenna to your new radio
> but don't expect 'perfect' reception of other than local stations. I'm
> afraid reception would never be as good as on the 'cable', but that
> doesn't mean it won't/can't be pretty good. A 'closed circuit' system
> like the cable will always be 'better' than broadcast reception.
> 'Doc
>
>
Thanks Doc, but don't you miss my point?
I *don't* want to use an external antenna - I want to use the co-ax cable
input.
There are channels on the cable which I can never receive with an external
aerial.
Ger

3153. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:52:03 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <s7ydnX-08pUnEdncRVn-jg@comcast.com>
Source record: 89574

You may not get very good results.
Some VHF TV antennas are built NOT to receive the FM broadcast band, so as to avoid front end overload. A smart TV antenna designer would also reduce gain in the aero bands, and the commercial FM bands for the same reason.

It may work well enough anyway.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3154. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:53:14 UTC
From: Howard <mensch90249@yahoo.com>
Message-ID: <im29k0dg1k0l9kmsbepgodvapktqlom9gv@4ax.com>
Source record: 89575

On Sun, 12 Sep 2004 18:24:05 +0100, "Ger" <gerdalt999@hotmail.com>
wrote:

>
>"Doc" <ltdoc@yahoo.com> wrote in message
>news:imW0d.73$tu2.8757@sooner.brightok.net...
>> Ger,
>> You should be able to add an external antenna to your new radio
>> but don't expect 'perfect' reception of other than local stations. I'm
>> afraid reception would never be as good as on the 'cable', but that
>> doesn't mean it won't/can't be pretty good. A 'closed circuit' system
>> like the cable will always be 'better' than broadcast reception.
>> 'Doc
>>
>>
>Thanks Doc, but don't you miss my point?
>I *don't* want to use an external antenna - I want to use the co-ax cable
>input.
>There are channels on the cable which I can never receive with an external
>aerial.
>Ger
>
Ger,
If you don't mind some disassembly & soldering there is a good way to
deal with this. I did this 'mod' to a friends portable stereo so he
could use a coax-fed external antenna at his cabin. You'll need a
bulkhead F connector (available at Ratshack) and a small stretch
RG-174 coax (you could just use 'plain wire' if you don't have some of
the coax laying around), a drill and a soldering iron. Open the radio
and find where the whip connects to the circuit board - typically
there is a short stretch of hookup wire from the whip to the board.
Then unsolder the hookup wire from the board. Next, find an open area
on the radio cabinet and drill a hole & mount the bulkhead F
connector. Strip each end of the coax and solder the center conductor
where you unsoldered the whip, then solder the shield/braid to a
ground trace on the board. At the other end of the coax solder the
center conductor to the center pin and the shield/braid to the 'shell'
side of the connector. Reassemble and your'e done. If you want to
get fancy, you can also install a switch so you can choose between the
whip and an external antenna.

Hope this is helpful,
Howard

3155. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 17:59:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4g39k09k638b9a7034td0u43cs1l27e3fk@4ax.com>
Source record: 89576

On Sun, 12 Sep 2004 16:31:12 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>
>From which I deduce the following input impedances -
>
>AT 1.9 MHz AT 7.0 MHz

This is a 20M system.

3156. Re: Antenna ground - how can you tell if it's good

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 18:00:59 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <v901d.1301$n%3.173595@twister.southeast.rr.com>
Source record: 89577

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ci1tkg$k2$1@hercules.btinternet.com...
> I have lost all previous contributions to this thread.
>
> But Jimmie gave the description of his radial system -
> > >
> > >12 12f t wires, Center ground stake 10 ft long, far end of each wire
has
> a
> > >stake about 3 ft long. These are used more to just hold the wires in
> place.
> >
> plus a brief description of type of soil and moisture content. I guessed
at
> wire diameters.
>
> From which I deduce the following input impedances -
>
> AT 1.9 MHz AT 7.0 MHz
> --------------- ----------------
> 10 + j0 13 + j11 ohms.
>
> Uncertainty = +/- 3 ohms which is adequate for the intended purpose.
>
> The above figures have been obtained using programs ENDFEED and RADIALS2
> (two different modelling methods) and averaging the results at soil
> resistivities of 100 and 300 ohm metres. Programs can be downloaded in a
> few seconds from website below. Calculating time no longer than needed to
> enter the simple data.
>
> In practice, only the resistances matter because the reactances are tuned
> out simultaneously with the antenna, equivalent to minor readjustments of
> the tuner. The resistance values, in conjunction with calculated
radiation
> resistance can be used to calculate radiating efficiency.
>
> If Jimmie should ever measure input resistance with similar uncertainty
(not
> too difficult) then I should be pleased to hear his results.

I had really not given it a whole lot of thought unti gettin invovled in
this thread but I am beginning to think that my sort of unique soil
conditions may effect my ground system considerably. With the moist, top
soil and clay at the lower levels I am getting a good primary power ground,

but now I dont think my RF connection to earth is very good at all ass the counter poise is in some fairly dry sandy clay. Wife says that when I installed this thing back in '94 that she remembered me putting in some longer wires than the 12 12 ft wires. At this point I am thinking maybe is was 8 12 ft wires and 4 1/4 wl 20m wires. I know the origonal plan waas to put in the 12 ft wires and 1/4 wl wires for several bands out to 80m with 3 or 4 wires for each band. I know I didnt do it for 80M but now I must admit I am not sure about other bands. I may have put in other radials for 20 and 40 meters. Shortly after this I almost totally gave up radio until recently.

3157. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 18:05:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6l39k0dgv3kcnrhf8vgrbf6lt014auftc5@4ax.com>
Source record: 89578

On 12 Sep 2004 10:01:04 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>Great, so I start my computor and click what to get started when I find exe ?
1. Click "Start" Button
2. Click "Run"
3. At the Open prompt enter CMD and hit return.

3158. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 20:00:22 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <iba9k0dhdrvsu6s68l5ulalu2mrb02unro@4ax.com>
Source record: 89579

On Sun, 12 Sep 2004 11:41:20 -0400, "Jim Leder" <k8cxm@hotmail.com>
wrote:

> I was having a discussion with another ham about dipoles and dipole
>lengths, and a rather silly question came up that neither one of us was sure
>of the answer. If a dipole is using INSULATED wire, can the electrical
>length be altered by just wrapping the ends more or less around the antenna
>wire when attaching the end insulator? Or does the INSULATED wire need to be
>cut? He thinks it does shorten the dipole, I say it doesn't. Hope he is
>right, it makes 'pruning' dipoles a lot easier.
>
>Thanks

I just remove a foot or two of insulation from the end of the wire,
before threading it through the insulator, and wrapping it back upon
itself -- that's possibly stronger mechanically, and avoids your
question completely :-)

bob
k5qwg

3159. Re: AH-4 Tuner and Attic Wire, Comments Please

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 20:16:36 UTC
From: Kevin <n9jkp@amsat.org>
Message-ID: <Xns95629B68E65BAkvinatchorusdotnet@216.168.3.30>
Source record: 89580

Tom and others,

I'm very interested in what you work out. I just moved into the city and have an old house with a big attic. There is really no place on the lot (very small 2500 sg ft lot) to put any antennas. The attic is the third floor the peak being 30-35 feet above ground. There is no metal in the attic accept one condiut for a light and the cast iron soil pipes for venting the drains.

I have an AH-2 tuner that I am hoping I can make work with my kenwood TS-690S. I do have a little ICOM 760 mobile that I will use if I absolutely have to but that's really for my car (not currently installed).

So any thoughts on strait or loop. For strait I can go 50' Also should I run COAX from the main floor to the tuner in the attic and use the castiron soil pipe as ground OR should I have my 50' straight and then bring the antenna on the outside of the building down to ground level (inverted L) and keep the AH-2 in or very near the shack?

Thanks,

Kevin N9JKP

posted and mailed]

> Any inputs on this plan are appreciated befor I spend the $$ on the
> tuner.
>
> Thanks,
>
> Tom - AC9TS

>
> This is the setup I had, along with a homebrew balun to feed the coax)
> for my SWL days and it worked pretty well. I pulled the wire down
> when I put all the other stuff up there but can re-install in any
> configuration available. The longest straight run I can make is ~ 35'
> diagonally. Woulkd I be better off just running a straight piece
> rather then all the ziggin' and zaggin'?? How about putting it up as
> a big "Z" (25' West, 35' diagonally NE, then 20' East)??

3160. Re: For women:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 20:19:30 UTC
From: Popcorn Lover <popcorn@N0T-SPAM.COM>
Message-ID: <Xns956291CFC53F6popcornN0TSPAMCOM@206.124.0.13>
Source record: 89581
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

whoever <whoever@wherever> wrote :

> So how many members are there now? Is it for woman only?
> Not to be rude but I wonder if it would be legal to have a group called
> " AmateurRadiomen" ;)

Why wouldn't it be? We have the Clear Creek Sportsman's Club here.

--
- Popcorn Lover
If you love popcorn too, there are no popcorn groups on usenet but
there IS one in Yahoo Groups:
http://groups.yahoo.com/group/Popcorn_Lovers
The internet's first-ever-in-the-world popcorn group!
Share the word on making great popcorn - come join us!

3161. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 20:21:02 UTC
From: Popcorn Lover <popcorn@N0T-SPAM.COM>
Message-ID: <Xns95629212FED4DpopcornN0TSPAMCOM@206.124.0.13>
Source record: 89582

Jack Twilley <jmt+usenet@twilley.org> wrote :

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> My yard is adjacent to a large park. The park's border with yards
> like mine consists of a chain link fence that's in excess of one
> thousand feet in length. The vegetation is such that I could run a
> long wire about a foot over the top of the fence for a large part of
> that thousand feet. Would the chain link fence cause negative
> interactions? Would this be a receive-only antenna and not any good
> for transmitting? I'd connect it to the random wire lug on my MFJ
> Versa Tuner II to match it to my Kenwood tube rig.
>
> Thoughts? Comments? Suggestions?

Sounds like the fence would make an excellent ground plane! Check and see
if it's grounded. If not, load it up as an antenna. :)

--
- Popcorn Lover
If you love popcorn too, there are no popcorn groups on usenet but
there IS one in Yahoo Groups:
http://groups.yahoo.com/group/Popcorn_Lovers
The internet's first-ever-in-the-world popcorn group!
Share the word on making great popcorn - come join us!

3162. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 20:21:41 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <pd21d.35153$Ka6.31314@okepread03>
Source record: 89583

"Jim Leder" <k8cxm@hotmail.com> wrote in message
news:w6_0d.18827$w_6.11062@fe37.usenetserver.com...
> I was having a discussion with another ham about dipoles and dipole
> lengths, and a rather silly question came up that neither one of us was
sure
> of the answer. If a dipole is using INSULATED wire, can the electrical
> length be altered by just wrapping the ends more or less around the
antenna
> wire when attaching the end insulator? Or does the INSULATED wire need to
be
> cut? He thinks it does shorten the dipole, I say it doesn't. Hope he is
> right, it makes 'pruning' dipoles a lot easier.
>
> Thanks
>

Good question...

3163. Re: Chain link fence interactions?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 20:22:06 UTC
From: Grassroots <Grassroots@no-email.net>
Message-ID: <Xns95629240B6D2TOKEN@206.124.0.13>
Source record: 89584

"Doc" <ltdoc@yahoo.com> wrote :

> Jack,
> It's certainly worth a try as a receiving antenna. Using it to
transmit
> will probably be a different story altogether! Along with all the other
> comments, just remember that those fences probably get very close to
> your neighbor's houses (and electonic devices). You wouldn't believe
> the complaints I got when doing something simular! LOL
> 'Doc

Just ground the fence and use it as a ground plane for a decent antenna.

--
Grassroots Activist
(no email - spoofed)

3164. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 21:56:13 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <4144c5fd$0$91003$39cecf19@news.twtelecom.net>
Source record: 89585

I assume he wants both, given the subject line.

tom
K0TAR

CW wrote:

> I got the impression that he was looking to use the antenna for FM
> broadcast. Where did the aircraft come from?
>
> "Tom Ring" <news0000@taring.org> wrote in message
> news:4143adaf$0$91008$39cecf19@news.twtelecom.net...
>
>>Depending on the antenna it will work well or not so well, but still may
>>cover VHF aircraft. A 300 to 75 balun should be fine, assuming the
>>antenna uses a 300 ohm balanced feed.
>>
>>And aircraft antennas tend to be vertical, at least the ones on the
>>ground, so orient it that way.
>>
>>tom
>>K0TAR
>>
>>Jim wrote:
>>
>>
>>>I know this is amateur group but I thought you guys will have some
>
> answer.
>
>>>Got a unused TV yagi antenna with about 12 directors, dipole, and a
>
> reflector.
>
>>>Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do I
>
> need to
>
>>>hook up a balun? If yes, would a 75 ohm be good enough? OR should I
>
> just forget
>
>>>about this plan? TIA.
>
>

>

3165. Re: For women:

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 22:42:42 UTC
From: n9vu@yahoo.com
Message-ID: <850c5b9d.0409121442.1494ebf8@posting.google.com>
Source record: 89586
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"CW" <no adddress@spam free.com> wrote in message
news:<FI6dncefyOQU69ncRVn-gw@comcast.com>...
> "whoever" <whoever@wherever> wrote in message
> news:1c-dnd1KcfloPN7cRVn-hA@centurytel.net...
> > Not to be rude but I wonder if it would be legal to have a group called
> > " AmateurRadiomen" ;)
> Of course. Why wouldn't it be?

Yes, and then watch the lawsuits pour in. This is just like black
groups that tout for blacks only. Try a white only group. Same
thing. Just an example, NOT a racist remark, I hope.

3166. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-12 22:53:54 UTC
From: CW <"no adddress"@spam>
Message-ID: <N4CdndDWBvIfTtncRVn-rQ@comcast.com>
Source record: 89587

As there is not a rec.radio.news.articles.about.radio and radio is of interest to most people here (apparently, not to you. What do you use your antennas for, decoration?) it fits here a damn site better than on alt.candlemaking. Thanks for your response. I had a spot in my bozo bin that needed filling. You'll fit nicely.

"Bill Turner" <noway@nohow.com> wrote in message news:5139k0l4lqj8facnm3gc1k407u97vi0c3h@4ax.com...
> On Sun, 12 Sep 2004 09:24:29 -0700, "CW" <no adddress@spam free.com>
> wrote:
>
> >How so? It's on topic. If this is the one I'm thinking of, it is a recording
> >of a BBC radio spot on the role of amateur radio operations during the World
> >Trade Center emergency.
>
> --
>
> On topic? Check the group name again. Find the word "antenna". If not
> familiar with same, look it up. Compose scathing reply. Delete it.
>
> --
> Bill W6WRT
>

3167. Re: Antenna Design Book

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 00:08:35 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10k9p5edu5lvp73@corp.supernews.com>
Source record: 89588

I recommend "Antennas For All Applications".

Antennas for all applications
• By: John Daniel Kraus; Ronald J Marhefka
• Publisher: New York : McGraw-Hill, •2002.
• ISBN: 0072321032 0071122400

"Matt" <nospam.hciss@yahoo.com> wrote in message
news:10k6kg73d5u4gf7@corp.supernews.com...
> Can anyone recommend a hobbyist antenna design book that covers some basic
> designs in 900Mhz, 2.4Ghz and 5.8Ghz bands?
>
> Matt
>
>

3168. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 02:37:54 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409121837.17c67f54@posting.google.com>
Source record: 89589

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<6l39k0dgv3kcnrhf8vgrbf6lt014auftc5@4ax.com>...
> On 12 Sep 2004 10:01:04 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
> >Great, so I start my computor and click what to get started when I find exe ?
> 1. Click "Start" Button
> 2. Click "Run"
> 3. At the Open prompt enter CMD and hit return.

Thanks for that.Unfortunately this does not allow AOPRO to work.
Seems like I will have to load DOS into the computor.
Fortunately I can still use the program on another computor until I sort it out
Art

3169. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 02:41:20 UTC
From: A-Tech <atech@austin.rr.com>
Message-ID: <kN71d.24043$nC5.14552@fe1.texas.rr.com>
Source record: 89590

CW wrote:
> I got the impression that he was looking to use the antenna for FM
> broadcast. Where did the aircraft come from?

"Tom Ring" <news0000@taring.org> wrote in message
news:4144c5fd$0$91003$39cecf19@news.twtelecom.net...
> I assume he wants both, given the subject line.

It's a shortwave radio - see this link.
http://mare.radio.tripod.com/8_2010faq.html

...Bryce

>
> tom
> K0TAR
>
> >
> > "Tom Ring" <news0000@taring.org> wrote in message
> > news:4143adaf$0$91008$39cecf19@news.twtelecom.net...
> >
> >>Depending on the antenna it will work well or not so well, but still may
> >>cover VHF aircraft. A 300 to 75 balun should be fine, assuming the
> >>antenna uses a 300 ohm balanced feed.
> >>
> >>And aircraft antennas tend to be vertical, at least the ones on the
> >>ground, so orient it that way.
> >>
> >>tom
> >>K0TAR
> >>
> >>Jim wrote:
> >>
> >>
> >>>I know this is amateur group but I thought you guys will have some
> >
> > answer.
> >
> >>>Got a unused TV yagi antenna with about 12 directors, dipole, and a
> >
> > reflector.
> >
> >>>Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do
I
> >

> > need to
> >
> >>>hook up a balun? If yes, would a 75 ohm be good enough? OR should I
> >
> > just forget
> >
> >>>about this plan? TIA.
> >
> >
> >

3170. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 02:53:05 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <lY71d.122969$S55.51433@clgrps12>
Source record: 89591

"denton" <denton@oregontrail.net> wrote in message
news:10k48almvc5ui2e@corp.supernews.com...
> Hi all...
> I am starting to work on something to use on 160 thru 20 meters.
> I currently have an aluminum mast that is 32 ft long with a small cap hat
on
> top.
> the antenna will sit in the center of an area approx 50 z 50' (backyard).
I
> plan to put down 40 plus radials, the majority which will be situated to
> radiate out from the base of the vertical.
> some will meander along the house foundation and property line..
> I plan on also tying in the galvanized (not chain link) fence around the
> back yard to the radial system, as well as the house plumbing.
> 40 meters should be direct feed.
> I will homebrew a matching L network for use on 160 thru 60 meters.
> I will also try a 20 meter tuning stubb.
> Does anyone know what the size of the loading coil that MFJ uses in their
80
> & 40 meter vertical?
> I have read of just about everything I can find online of this sort of
> project and have played with Eznec demo a bit and think this will be a
> doable project.
>
>
Consider the input impedance on 160m. With 1.5 kW the voltage at the base
of the antenna is likely to be in the 20 to 30 kV range (about 5 - 7.5 kV
with 100 W) . Also for an "L" network, suggest you use a series "L", shunt
"L" configuration. Series "L" shunt "C" requires very large values for the
shunt capacitor.

73,

Frank (VE6CB)

3171. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 03:00:07 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci32fnnjg1@sparta.btinternet.com>
Source record: 89592

Its not clear what you have in mind, but -

Doubling an antenna wire closely back on itself over a short length has the effect of shortening overall length of the antenna just as if the the doubled-back portion has been cut off.

Where the wire is double it behaves as a single wire of slightly greater the diameter.

3172. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 04:00:45 UTC
From: CW <"no adddress"@spam>
Message-ID: <IomdnaaAd9fwhtjcRVn-jQ@comcast.com>
Source record: 89593

Looks like your right. I read the body of the message but not the subject.

"Tom Ring" <news0000@taring.org> wrote in message
news:4144c5fd$0$91003$39cecf19@news.twtelecom.net...
> I assume he wants both, given the subject line.
>
> tom
> K0TAR
>
> CW wrote:
>
> > I got the impression that he was looking to use the antenna for FM
> > broadcast. Where did the aircraft come from?
> >
> > "Tom Ring" <news0000@taring.org> wrote in message
> > news:4143adaf$0$91008$39cecf19@news.twtelecom.net...
> >
> >>Depending on the antenna it will work well or not so well, but still may
> >>cover VHF aircraft. A 300 to 75 balun should be fine, assuming the
> >>antenna uses a 300 ohm balanced feed.
> >>
> >>And aircraft antennas tend to be vertical, at least the ones on the
> >>ground, so orient it that way.
> >>
> >>tom
> >>K0TAR
> >>
> >>Jim wrote:
> >>
> >>
> >>>I know this is amateur group but I thought you guys will have some
> >
> > answer.
> >
> >>>Got a unused TV yagi antenna with about 12 directors, dipole, and a
> >
> > reflector.
> >
> >>>Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do
I
> >
> > need to
> >
> >>>hook up a balun? If yes, would a 75 ohm be good enough? OR should I

> >
> > just forget
> >
> >>>about this plan? TIA.
> >
> >
> >

3173. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 04:07:37 UTC
From: CW <"no adddress"@spam>
Message-ID: <mPudnWBmFcuRgNjcRVn-hg@comcast.com>
Source record: 89594

I'm familiar with the radio. It has FM broadcast and airband in addition to shortwave and medium wave.

"A-Tech" <atech@austin.rr.com> wrote in message news:kN71d.24043$nC5.14552@fe1.texas.rr.com...
> CW wrote:
> > I got the impression that he was looking to use the antenna for FM
> > broadcast. Where did the aircraft come from?
>
> "Tom Ring" <news0000@taring.org> wrote in message
> news:4144c5fd$0$91003$39cecf19@news.twtelecom.net...
> > I assume he wants both, given the subject line.
>
> It's a shortwave radio - see this link.
> http://mare.radio.tripod.com/8_2010faq.html
>
> ...Bryce
>
>
>
>
>
>
>
>
>
> >
> > tom
> > K0TAR
> >
> > >
> > > "Tom Ring" <news0000@taring.org> wrote in message
> > > news:4143adaf$0$91008$39cecf19@news.twtelecom.net...
> > >
> > >>Depending on the antenna it will work well or not so well, but still may
> > >>cover VHF aircraft. A 300 to 75 balun should be fine, assuming the
> > >>antenna uses a 300 ohm balanced feed.
> > >>
> > >>And aircraft antennas tend to be vertical, at least the ones on the
> > >>ground, so orient it that way.
> > >>
> > >>tom
> > >>K0TAR
> > >>

> > >>Jim wrote:
> > >>
> > >>
> > >>>I know this is amateur group but I thought you guys will have some
> > >
> > > answer.
> > >
> > >>>Got a unused TV yagi antenna with about 12 directors, dipole, and a
> > >
> > > reflector.
> > >
> > >>>Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input.
Do
> I
> > >
> > > need to
> > >
> > >>>hook up a balun? If yes, would a 75 ohm be good enough? OR should I
> > >
> > > just forget
> > >
> > >>>about this plan? TIA.
> > >
> > >
> > >
>
>

3174. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 05:29:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dqbak0lt9ubggilidb9inljv4bqoqd4ru7@4ax.com>
Source record: 89595

On 12 Sep 2004 19:37:54 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
wrote:
>Seems like I will have to load DOS into the computor.
If it doesn't run under CMD, it will probably need more than DOS -
like EMM drivers and those antediluvian memory extenders when a
megabyte cost a kilobuck.

3175. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 06:06:38 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409122206.462567b3@posting.google.com>
Source record: 89596

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>
> I think serious family research work would have to begin at home in the
> States.

I've found the hardest part is linking the old scottish family history
with the later U.S. history. It seems many fled Scotland for various
reasons during the years, 1600-1700's, and records are scarce. I have
pretty good records of the Scotland Keith's, and I have traced my U.S.
history back to appx 1790-1810 VA., but can't find links to trace back
to Scotland. So it's like a missing gap. But there are pay sources
with possibly more info that I haven't checked yet. "IE: ship records,
etc".
There were Keiths in New England "MA." as early as the 1600's, but I
seem to be linked more to a VA. point of entry from the records I've
seen so far. The old Keith history in Scotland is quite well known as
they were quite a cast of characters, but it's like it hits a brick
wall at the point the various family branches came to the U.S. Hard to
link the two in many cases, unless you really scour all sources. Also
early U.S. history and documents can be meager to nil. Myself, I hit
the brick wall at the end of the 1700's. 1800 onward, I'm pretty
solid. I've traced back to my g-g-g-g-grandfather just using the web.
Back into the 1700's is meager. So even though I'm most likely related
to some of the old big wheels in Scotland, I have no idea which line I
would come from. There are so many lines....The 1700's must have been
a rough time in Scotland for a family with the land and general wealth
the old Keith clan had, to decide to split up and split town for the
new world.

A visit to Edinburgh would be more profitable than a vist to London
> during a holiday visit.

Most of the Keith clan was centered around Aberdeen. They founded one
of the old colleges there, and Dunottar castle is the old Keith family
castle. Mel Gibson filmed certain parts of "Hamlet" at that castle. Or
whats left of it anyway...It's in ruins now...
>
> Another visit to a high-class tailor whilst in Edinburgh on holiday would
> eventually fit you up with a genuine Maxwell tartaned kilt. I expect you
> know that a kilt is a heavy, pleated, woven skirt, with a sporan to contain
> your loose cash, under which is nothing in the way of clothing. Many
> Scotsmen still wear them and not on ceremonial occsions. Furthermore,
> Scotswomen are proud to be so accompanied.

I'm not much for skirts myself. Rednecks in Texas generally don't wear them..:/
But there is a Keith clan, family tarton, coat of arms, etc, etc...Our tarton is kind of a green/blue plaid mix...

One story of the early Scotland Keiths can be found at:
http://www.thekeithclan.com/

Kind of interesting...We have a pretty colorful history, but not all is that good...
There was a long running feud with another clan due to some acts involving some of the Keiths..Resulted in the death of a girl one of the Keiths fancied..."kinda long story, but it can be found on the net. "That started a feud which lasted for many, many years. I think it just recently finally ended with both clans finally getting together and forming a truce.. MK

3176. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 07:15:56 UTC
From: Doc <ltdoc@yahoo.com>
Message-ID: <0Pb1d.75$tu2.9481@sooner.brightok.net>
Source record: 89597

Jim,
It does shorten the antenna. Not exactly as much as if the 'extra'
wire were cut off, but close enough for 'gumment' work. The
difference won't make enough difference at HF to make a difference.
'Doc

3177. non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 10:04:00 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0409130204.7bafd05f@posting.google.com>
Source record: 89598

I shredded a few carbon resistors and noticed that many have the carbon layer laid out in a spiral pattern around the cylindrical core, up to several turns.

I also shredded a few metal-film ones, but could not figure is the metal was on a single layer or not, and how it was connected to the leads.

I wonder which best approximates a non-inductive resistance.

Do "spiral" carbon resistors have a significant inductance?

Do all metal-film resistors have a single layer, or are there some multilayered or (G_d forbid!!) spiral-layered, with plentiful capacitive bypass???

I have found a set of 16 x 100 ohm / 2W metal-film resistors which I am ready to assemble them into a 400 ohm / 15W (derated) terminator for a T2FD, but I'll wait for advice...

tnx de n1jpr/i2
filippo
http://filippo.ru.ru

3178. new 2m repeater on space station

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 10:17:59 UTC
From: g3zhi@hotmail.com
Message-ID: <415773aa.1772632@news.btinternet.com>
Source record: 89599

new 2m repeater on space station
a new 2m repeater is now operating on the
international space station 24 x 7
the uplink is on uhf 437.800 and the downlink is on vhf 145.800
no tone burst or ctcss is required
the radio is a kenwood tmd700 operating in remote crossband mode
it just retransmits on vhf what it hears on uhf
so if you are getting through you can hear yourself
on the downlink

anyone can work it using a co-linear

to see where the space station is 'live' check

http://science.nasa.gov/temp/StationLoc.html

for 3 days in advance predictions download the pcsat decoder program

http://www.ui-view.com/uiview32/pcdec242.msi

when the iss repeater is being worked the audio may be streamed in the
amsat
conference server on echolink so anyone anywhere in the world can
listen in

73 Ian G3ZHI

http://www.qsl.net/g3zhi - many ham radio links
http://www.ukirlp.co.uk

G4NJI IRLP 5200 Echolink 135909
Rotherham simplex 145.2875mhz

GB3XN IRLP 5708 Echolink 153126
Langold 430.925 Mhz

Ian Abel G3ZHI
52 Hollytree Ave
Maltby
Rotherham
Yorkshire
S66 8DY

Tel: 01709 799911
Mobile 0783 338 0578

3179. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 10:27:53 UTC
From: Frank <frank599@telus.net>
Message-ID: <JCe1d.97059$jZ5.12695@clgrps13>
Source record: 89600

"denton" <denton@oregontrail.net> wrote in message
news:10k48almvc5ui2e@corp.supernews.com...
> Hi all...
> I am starting to work on something to use on 160 thru 20 meters.
> I currently have an aluminum mast that is 32 ft long with a small cap hat
on
> top.
> the antenna will sit in the center of an area approx 50 z 50' (backyard).
I
> plan to put down 40 plus radials, the majority which will be situated to
> radiate out from the base of the vertical.
> some will meander along the house foundation and property line..
> I plan on also tying in the galvanized (not chain link) fence around the
> back yard to the radial system, as well as the house plumbing.
> 40 meters should be direct feed.
> I will homebrew a matching L network for use on 160 thru 60 meters.
> I will also try a 20 meter tuning stubb.
> Does anyone know what the size of the loading coil that MFJ uses in their
80
> & 40 meter vertical?
> I have read of just about everything I can find online of this sort of
> project and have played with Eznec demo a bit and think this will be a
> doable project.

Also the series inductor should have a very high Q for 160 m. A Q of 1000
will loose about 30% of your power.

Frank

3180. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 11:26:37 UTC
From: Jim Leder <k8cxm@hotmail.com>
Message-ID: <Jtf1d.19852$w_6.10038@fe37.usenetserver.com>
Source record: 89601

It is kind of hard to describe, but I guess 'doubling it over' would be closest. I've always cut extra length off, but the downside is cutting too much off. I ask this question because of a discussion we had about dipoles: I have an Alpha Delta DXEE that is near worthless on 40, but I would sure like an easy way to attempt to get it resonant on 30, without cutting the end 40 meter wires. My friend suggested just 'doubling the wires over on the ends to see if I could shorten it enough to get it in close. My club has an antenna analyzer, so I may give it a try.

Thanks

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:ci32fnnjg1@sparta.btinternet.com...
> Its not clear what you have in mind, but -
>
> Doubling an antenna wire closely back on itself over a short length has
> the
> effect of shortening overall length of the antenna just as if the the
> doubled-back portion has been cut off.
>
> Where the wire is double it behaves as a single wire of slightly greater
> the
> diameter.
>
>

3181. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 11:55:39 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41458abb$0$91011$39cecf19@news.twtelecom.net>
Source record: 89602

A-Tech wrote:

> It's a shortwave radio - see this link.
> http://mare.radio.tripod.com/8_2010faq.html
>
> ...Bryce
>

I also own one. It does aircraft, FM broadcast, SW, etc.

tom
K0TAR

3182. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 12:12:01 UTC
From: Yeah <Makniovo_pdanebi@yahoo.com>
Message-ID: <ci42p2$b6d$1@sunce.iskon.hr>
Source record: 89603

"A-Tech" <atech@austin.rr.com> wrote in message
news:ow90d.7798$le.1852@fe2.texas.rr.com...
> Hi,
>
> I am a newbie here and have just dropped in to ask a single technical
> question.
>
> Living as I do in a suburban area, I use an FM antenna to draw the
stations
> located in
> a certain vector from me. A station of interest is located at 107.1MHz
but
> is interfered with by an off-axis stronger signal at 106.9MHz
>
Hi Bryce,

you can try phase cancellation technique as described at
http://www.geocities.com/toddemslie/phase_cancellation.htm

Good luck!

Mario 9A4DE

3183. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 12:32:26 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <urg1d.5778$5t4.5625@trnddc01>
Source record: 89604

"SpamHog" <n1jpr@hotmail.com> wrote in message
news:95a201e0.0409130204.7bafd05f@posting.google.com...
> I shredded a few carbon resistors and noticed that many have the
> carbon layer laid out in a spiral pattern around the cylindrical core,
> up to several turns.
>
> I also shredded a few metal-film ones, but could not figure is the
> metal was on a single layer or not, and how it was connected to the
> leads.
>
>
> I wonder which best approximates a non-inductive resistance.
>
I am no expert on this, but what you describe as carbon is perhaps carbon
film
>Your best bet for low inductance would probably be the carbon composition
type. These are found in radios from the 60's-80's- Mouser is still carrying
these.
In appearance they look like a perfect cylinder- no bumps on the ends.
Dale W4OP

3184. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 15:05:36 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <andbk0tcg6pbkb1b0vpm6eo3ra5d0haqe1@4ax.com>
Source record: 89605

On Sun, 12 Sep 2004 02:11:36 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>My phone number is 021-561-4959 and is unlikely to change. But what you may
>find as a result of a wecome call is anybody's guess.
>
>I can well understand your interest in J.C.Maxwell's history. The Scots
>family was not very large. It is fairly likely you have connections. Should
>you enquire further then, as perhaps you have already found, a google on
>"Maxwell" is a good starting point. At the age of 13 he had already
>established mimself as a budding genius. His professional career is well
>documented.

Reg, I have several documents about JC, and at one point on the internet I learned that his genealogy is available for viewing in the JCM museum, which I believe is in Edinburg, but not sure. My clan came from Glasgow, so there may be no connection.

>But I can't resist the opportunity to add, it was Heaviside's self-taught
>nathematics which taught the world how to understand radio waves in all the
>world's text books.

I'm well aware of Heaviside's contribution to organizing much of Maxwell's work, which wasn't suffuciently organized for general use. I have original copies of a 3-volume set of Heaviside's books, plus an original copy of Hertz' "Electric Waves."

>I think serious family research work would have to begin at home in the
>States. A visit to Edinburgh would be more profitable than a vist to London
>during a holiday visit.

That's exactly what I thought.

>Another visit to a high-class tailor whilst in Edinburgh on holiday would
>eventually fit you up with a genuine Maxwell tartaned kilt. I expect you
>know that a kilt is a heavy, pleated, woven skirt, with a sporan to contain
>your loose cash, under which is nothing in the way of clothing. Many
>Scotsmen still wear them and not on ceremonial occsions. Furthermore,
>Scotswomen are proud to be so accompanied.
>----
>Yours, Reg, G4FGQ

I have a copy of the Maxwell clan's tartan and coat of arms, but I don't think I'd get into a kilt.

Thanks for the welcome info, Reg,

Walt

3185. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 15:22:43 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ci4e4s$2gg$1@newshost.mot.com>
Source record: 89607

"Yeah" <Makniovo_pdanebi@yahoo.com> wrote in message
news:ci42p2$b6d$1@sunce.iskon.hr...
>
> "A-Tech" <atech@austin.rr.com> wrote in message
> news:ow90d.7798$le.1852@fe2.texas.rr.com...
> > Hi,
> >
> > I am a newbie here and have just dropped in to ask a single technical
> > question.
> >
> > Living as I do in a suburban area, I use an FM antenna to draw the
> stations
> > located in
> > a certain vector from me. A station of interest is located at 107.1MHz
> but
> > is interfered with by an off-axis stronger signal at 106.9MHz
> >
> Hi Bryce,
>
> you can try phase cancellation technique as described at
> http://www.geocities.com/toddemslie/phase_cancellation.htm
> Good luck!
> Mario 9A4DE

This *IS* simply another way of describing an antenna with a null.

--
Steve N, K,9;d, c. i My email has no u's.

3186. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 15:23:22 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <apebk0d8c9djqm7bvemmnj9n49gcgv6qck@4ax.com>
Source record: 89606

On 12 Sep 2004 23:06:38 -0700, nm5k@wt.net (Mark Keith) wrote:

>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
>>
>> I think serious family research work would have to begin at home in the
>> States.
>snip
>One story of the early Scotland Keiths can be found at:
>http://www.thekeithclan.com/
>
>Kind of interesting...We have a pretty colorful history, but not all
>is that good...
>There was a long running feud with another clan due to some acts
>involving some of the Keiths..Resulted in the death of a girl one of
>the Keiths fancied..."kinda long story, but it can be found on the
>net. "That started a feud which lasted for many, many years. I think
>it just recently finally ended with both clans finally getting
>together and forming a truce.. MK

Very interesting, Mark.

My Maxwell ancestors kept a solid record beginning with g-g-g-g grandfather born in the late 1700's. My aunts, my dad 's sisters, organized the data on a long sheet of grocery-store wrapping paper, which I put into the computer using the LDS program. So I have the data prior to their leaving Scotland. What I need now is data preceding that grandfather, which can only be found in Scotland.

However, I'm not as much interested in going back farther, I'd simply like to know if any of my lines crossed any of JC Maxwell's, which is why I'd like to see his genealogy list in his museum.

Good Luck with your search, Mark,

Walt, W2DU

3187. Horizontal Omni Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 16:27:55 UTC
From: Matt <nospam.hciss@yahoo.com>
Message-ID: <10kbilfsq70t6a4@corp.supernews.com>
Source record: 89608

Does anyone know of any pointers on how to construct a horizontal omni antenna in the 900Mhz to 5.8Ghz? Not wide band like that just something that works somewhere in there. Just real curious how horizontal omnis work and would like to experiment with one somewhere in that band.

Matt

3188. Re: Horizontal Omni Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 17:10:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sqkbk05rp74ka7m8a9g0t0a6rqog6mt3ef@4ax.com>
Source record: 89609

On Mon, 13 Sep 2004 11:27:55 -0500, "Matt" <nospam.hciss@yahoo.com>
wrote:
>Does anyone know of any pointers on how to construct a horizontal omni
>antenna in the 900Mhz to 5.8Ghz?

Hi Matt,

Folded Dipole, bent into a circle or square with care not to bring the
opposite ends into contact. The feed point half should have a thinner
thickness than the folded back half.

73's
Richard Clark, KB7QHC

3189. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 17:28:25 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qm43jF10fcmgU1@uni-berlin.de>
Source record: 89610

Q. What's the difference between a Genealogist and a Gynaecologist?

a. One looks up the family tree, the other looks up the family bush.

> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> > I think serious family research work would have to begin at home in the
> > States.

3190. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 17:31:22 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qm43jF10fcmgU2@uni-berlin.de>
Source record: 89611

Can't something be done about the erroneous date format?

In the English-speaking world, it should read, "11/9/2001"

3191. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 17:40:45 UTC
From: k7itm@aol.com
Message-ID: <3200347.0409130940.43919ace@posting.google.com>
Source record: 89612

Metal-film and metal-oxide resistors are commonly done as a spiral
like the carbon film ones you describe. It's possible to find RF
metal film resistors which are relatively non-inductive, but clearly
the spiral ones will have an inductance about the same as a coil with
the same dimensions and number of turns. OTOH, that may not be a
problem--see example below. I've put a couple 100-ohm 2-W metal-oxide
resistors in parallel, with very short leads, and tested the
combination for return loss and found it to be better than 20dB r.l.
(1.22:1 SWR) out to beyond 150MHz. As they say, your results may
vary. But in any event, if you can use the resistors you have to make
a 50-ohm load and have a 50 ohm SWR meter you trust, you can get at
least an idea of their performance at RF.

Cheers,
Tom

(Example: say you have a 100 ohm metal-oxide resistor which is a
four-turn spiral 0.25 inches in diameter and 0.5 inches long. Its
inductance will be about
40 nanohenries, which less than j8 ohms at 30MHz. As a non-precision
load, that probably won't be an issue at all.)

n1jpr@hotmail.com (SpamHog) wrote in message
news:<95a201e0.0409130204.7bafd05f@posting.google.com>...
> I shredded a few carbon resistors and noticed that many have the
> carbon layer laid out in a spiral pattern around the cylindrical core,
> up to several turns.
>
> I also shredded a few metal-film ones, but could not figure is the
> metal was on a single layer or not, and how it was connected to the
> leads.
>
>
> I wonder which best approximates a non-inductive resistance.
>
>
>
> Do "spiral" carbon resistors have a significant inductance?
>
> Do all metal-film resistors have a single layer, or are there some
> multilayered or (G_d forbid!!) spiral-layered, with plentiful
> capacitive bypass???
>
>
>

> I have found a set of 16 x 100 ohm / 2W metal-film resistors which I
> am ready to assemble them into a 400 ohm / 15W (derated) terminator
> for a T2FD, but I'll wait for advice...
>
>
> tnx de n1jpr/i2
> filippo
> http://filippo.ru.ru

3192. Re: Antenna modeling software

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 17:42:05 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409130942.5665a02f@posting.google.com>
Source record: 89613

I would not go as far as to say that.
With my desktop which is old I loaded it with two browsers
Windows 2000 and Windows 98 to get the DOS ability.
With the lap top just adding a Dos segment without loading the memory
seems to be the way to go. Understand the local University uses a
special program for combination of DOS with XP so it is not
insurmountable.
Art

ichard Clark <kb7qhc@comcast.net> wrote in message
news:<dqbak0lt9ubggilidb9inljv4bqoqd4ru7@4ax.com>...
> On 12 Sep 2004 19:37:54 -0700, aunwin@insightbb.com (Art Unwin KB9MZ)
> wrote:
> >Seems like I will have to load DOS into the computor.
> If it doesn't run under CMD, it will probably need more than DOS -
> like EMM drivers and those antediluvian memory extenders when a
> megabyte cost a kilobuck.

3193. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 17:42:16 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <YZk1d.220679$Lj.194476@fed1read03>
Source record: 89614

"Airy R. Bean" <me@privacy.net> wrote in message
news:2qm43jF10fcmgU2@uni-berlin.de...
> Can't something be done about the erroneous date format?
>
> In the English-speaking world, it should read, "11/9/2001"
>
>

We who speak the most English make the rules.

It has always been "month-day-year" in the United States of America.

Jack

3194. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 18:06:22 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <ykl1d.212$ax4.173@newsread3.news.pas.earthlink.net>
Source record: 89615

"Walter Maxwell" <w2du@iag.net> wrote in message
news:andbk0tcg6pbkb1b0vpm6eo3ra5d0haqe1@4ax.com...
> On Sun, 12 Sep 2004 02:11:36 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >My phone number is 021-561-4959 and is unlikely to change. But what you
may
> >find as a result of a wecome call is anybody's guess.
> >
> >I can well understand your interest in J.C.Maxwell's history. The Scots
> >family was not very large. It is fairly likely you have connections.
Should
> >you enquire further then, as perhaps you have already found, a google on
> >"Maxwell" is a good starting point. At the age of 13 he had already
> >established mimself as a budding genius. His professional career is well
> >documented.
>
> Reg, I have several documents about JC, and at one point on the internet I
> learned that his genealogy is available for viewing in the JCM museum,
which I
> believe is in Edinburg, but not sure. My clan came from Glasgow, so there
may
> be no connection.
>
> >But I can't resist the opportunity to add, it was Heaviside's self-taught
> >nathematics which taught the world how to understand radio waves in all
the
> >world's text books.
>
> I'm well aware of Heaviside's contribution to organizing much of Maxwell's
work,
> which wasn't suffuciently organized for general use. I have original
copies of a
> 3-volume set of Heaviside's books, plus an original copy of Hertz'
"Electric
> Waves."
>
> >I think serious family research work would have to begin at home in the
> >States. A visit to Edinburgh would be more profitable than a vist to
London
> >during a holiday visit.
>
> That's exactly what I thought.
>

> >Another visit to a high-class tailor whilst in Edinburgh on holiday would
> >eventually fit you up with a genuine Maxwell tartaned kilt. I expect you
> >know that a kilt is a heavy, pleated, woven skirt, with a sporan to
contain
> >your loose cash, under which is nothing in the way of clothing. Many
> >Scotsmen still wear them and not on ceremonial occsions. Furthermore,
> >Scotswomen are proud to be so accompanied.
> >----
> >Yours, Reg, G4FGQ
>
> I have a copy of the Maxwell clan's tartan and coat of arms, but I don't
think
> I'd get into a kilt.
>
> Thanks for the welcome info, Reg,
>
> Walt
>
Not to diminish Heaviside's contribution, it was Gibb's work that led to the
present mathematical expression of Maxwell's equations.
The Heaviside equation survives to this day as the description of the
electromagnetic field of a moving charged particle.
But since Gibbs was American I'm sure you Brits will argue.
;^)
73
H.
NQ5H

3195. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 18:11:41 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10kbomu7lrbdaf5@corp.supernews.com>
Source record: 89616

Frank wrote:
>
> Also the series inductor should have a very high Q for 160 m. A Q of 1000
> will loose about 30% of your power.

Can you tell us how you calculated this? How much ground loss did you
assume?

Roy Lewallen, W7EL

3196. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 18:19:50 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <i0pbk0109d74g34cjualmleofnfu51lrpp@4ax.com>
Source record: 89617

On Mon, 13 Sep 2004 18:31:22 +0100, "Airy R. Bean" <me@privacy.net>
wrote:

>Can't something be done about the erroneous date format?
>
>In the English-speaking world, it should read, "11/9/2001"
>

Eh? When was the last time Tony Blair talked about the events of
"11-9"?

Bob
k5qwg

3197. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 18:42:30 UTC
From: dplatt@radagast.org
Message-ID: <10kbqgmo068se39@corp.supernews.com>
Source record: 89618

In article <f5abk0phlf09pskevmch0gsu7kk225fmck@4ax.com>,
Bill Turner <noway@nohow.com> wrote:

>If your application is really critical, spend some time browsing the
>manufacturer's website. The more reputable manufacturers will have lots
>of information available.

Or use one of the low-inductance metal-film/metal-foil types. Both
Vishay and Caddock offer resistors which have low levels of parasitic
inductance and capacitance.

Ferexample, Vishay quotes their VPR220Z precision-foil power resistors
(TO-220) as having no more than 0.1 uH of inductance ("due mainly to
the leads") and no more than 1 pF of capacitance, with typical values
being half to a third of those.

Caddock has similar parts, and several of the Caddock lines are
easily available through Mouser.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3198. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 18:59:15 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4145ef9a_5@corp.newsgroups.com>
Source record: 89619

Bill Turner wrote:
> Wirewound resistors are
> also quite stable but not suited for RF, or course.

I have some non-inductive wirewound resistors. They
simply reverse the direction of the winding every
so often to obtain canceling fields.
--
73, Cecil http://www.qsl.net/w5dxp

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3199. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 19:01:32 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4145f021$1_5@corp.newsgroups.com>
Source record: 89620

Walter Maxwell wrote:
> ... I don't think I'd get into a kilt.

You would, no doubt, make the cover of Worldradio. :-)

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3200. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 19:10:43 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <Tgm1d.141$t61.40@clgrps13>
Source record: 89521

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10kbomu7lrbdaf5@corp.supernews.com...
> Frank wrote:
> >
> > Also the series inductor should have a very high Q for 160 m. A Q of
1000
> > will loose about 30% of your power.
>
> Can you tell us how you calculated this? How much ground loss did you
> assume?
>
> Roy Lewallen, W7EL

I have run a number of NEC models (NEC-Win Pro), for ground mounted verticals with a radial system, using the Sommerfeld/Norton ground models (usually in the range of: Sigma = 0.02 S/m Er = 17) -- although not for the specific dimensions indicated. My models would be approximately 0.001 wavelengths above ground (as per Cebik: Basic Antenna Modeling). The input impedance calculated is of the order of 1.5 - j1500. From these data it is relatively trivial to estimate the required Q of a series inductor.

I have been very interested in such antennas, but have never actually gotten around to building -- just modeling! If the original poster is interested, I would be very happy to model the specific dimensions.

Frank Meredith (VE6CB)

3201. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 19:20:07 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409131120.4a897a08@posting.google.com>
Source record: 89522

I doubt that the coil will have a Q of more than 300 if that !
Art

"Frank" <frank599@telus.net> wrote in message news:<JCe1d.97059$jZ5.12695@clgrps13>...
> "denton" <denton@oregontrail.net> wrote in message
> news:10k48almvc5ui2e@corp.supernews.com...
> > Hi all...
> > I am starting to work on something to use on 160 thru 20 meters.
> > I currently have an aluminum mast that is 32 ft long with a small cap hat
> on
> > top.
> > the antenna will sit in the center of an area approx 50 z 50' (backyard).
> I
> > plan to put down 40 plus radials, the majority which will be situated to
> > radiate out from the base of the vertical.
> > some will meander along the house foundation and property line..
> > I plan on also tying in the galvanized (not chain link) fence around the
> > back yard to the radial system, as well as the house plumbing.
> > 40 meters should be direct feed.
> > I will homebrew a matching L network for use on 160 thru 60 meters.
> > I will also try a 20 meter tuning stubb.
> > Does anyone know what the size of the loading coil that MFJ uses in their
> 80
> > & 40 meter vertical?
> > I have read of just about everything I can find online of this sort of
> > project and have played with Eznec demo a bit and think this will be a
> > doable project.
>
> Also the series inductor should have a very high Q for 160 m. A Q of 1000
> will loose about 30% of your power.
>
> Frank

3202. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 19:47:47 UTC
From: see sea oh ecks at you aitch see dot comm <spammers@bugger.off.invalid>
Message-ID: <ci4th3$r33$1@gabriel.uhc.com>
Source record: 89523

Jack Painter <223bthp@cox.net> wrote:
> We who speak the most English make the rules.

> It has always been "month-day-year" in the United States of America.

Oh yes - we forgot that there are more American English speakers in
the world than English speakers.

Not!
--
Chris Cox, N0UK/G4JEC NIC Handle: CC345
If at first you don't succeed, skydiving is not for you.

3203. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 20:09:00 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <w7n1d.147$t61.135@clgrps13>
Source record: 89524

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0409131120.4a897a08@posting.google.com...
> I doubt that the coil will have a Q of more than 300 if that !
> Art
>
>
>
>
>
> "Frank" <frank599@telus.net> wrote in message
news:<JCe1d.97059$jZ5.12695@clgrps13>...
> > "denton" <denton@oregontrail.net> wrote in message
> > news:10k48almvc5ui2e@corp.supernews.com...
> > > Hi all...
> > > I am starting to work on something to use on 160 thru 20 meters.
> > > I currently have an aluminum mast that is 32 ft long with a small cap
hat
> > on
> > > top.
> > > the antenna will sit in the center of an area approx 50 z 50'
(backyard).
> > I
> > > plan to put down 40 plus radials, the majority which will be situated
to
> > > radiate out from the base of the vertical.
> > > some will meander along the house foundation and property line..
> > > I plan on also tying in the galvanized (not chain link) fence around
the
> > > back yard to the radial system, as well as the house plumbing.
> > > 40 meters should be direct feed.
> > > I will homebrew a matching L network for use on 160 thru 60 meters.
> > > I will also try a 20 meter tuning stubb.
> > > Does anyone know what the size of the loading coil that MFJ uses in
their
> > 80
> > > & 40 meter vertical?
> > > I have read of just about everything I can find online of this sort of
> > > project and have played with Eznec demo a bit and think this will be a
> > > doable project.
> >
> > Also the series inductor should have a very high Q for 160 m. A Q of
1000
> > will loose about 30% of your power.
> >

> > Frank

Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53. I have written a program In MathCAD Pro, which indicates a coil made from 1/4" copper pipe, 12" long, and 3 inches diameter has an inductance of 39 uH and a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q of 1600). To be honest I have never built such a coil, and it would probably be very difficult to measure. I agree that typical "Airdux" coils have a Q in the range of 300 or so.(Silver plating, or gold, would also be desirable to prevent lossy copper oxide build up). Anyway if you are interested I can send you the MathCAD file. I would be very happy if somebody could check my math. It think the point I was trying to make it that electrically short antennas have such a low real input impedance that building an efficient matching network is challenging to say the least. Even if such networks are feasible the huge voltages developed at the base could prove to be a problem.

73,

Frank

3204. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 20:38:15 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Wyn1d.43162$Ka6.15258@okepread03>
Source record: 89525

"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
wrote

> Jack Painter <223bthp@cox.net> wrote:
> > We who speak the most English make the rules.
>
> > It has always been "month-day-year" in the United States of America.
>
> Oh yes - we forgot that there are more American English speakers in
> the world than English speakers.
>
> Not!
> --
> Chris Cox, N0UK/G4JEC NIC Handle: CC345

In fact, there are few countries, and Britain is definitely not one of them, that teach or speak proper English. It is a language butchered in pronounciation by all that England influenced, and was only corrected in teaching and pronounciation in America. We speak English, not an adaptation of it. If your understanding of this fact is lacking, there are many places for you to correct your deficiency, but it will not be here.

73,

Jack

3205. Re: Horizontal Omni Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 20:41:13 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <q7dh12-p3u.ln1@p400bob.lse.com.au>
Source record: 89527

Hi Matt

I have done some work with three leaf clovers, both singly and stacked.
probably not real effective/easy to build on the higher freqs tho..

Stacking can help some of the nulls that appear.

Cheers Bob VK2YQA

Matt wrote:
> Does anyone know of any pointers on how to construct a horizontal omni
> antenna in the 900Mhz to 5.8Ghz? Not wide band like that just something
> that works somewhere in there. Just real curious how horizontal omnis work
> and would like to experiment with one somewhere in that band.
>
> Matt
>
>

3206. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 21:04:40 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <41460964.215847271@news.blueyonder.co.uk>
Source record: 89526

On Mon, 13 Sep 2004 16:38:15 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>We speak English, not an adaptation
>of it

I beg to differ!

I don't think the word "Hi" is English yet it's the ubiquitous
greeting in the US (and unfortunately over here in the UK also).
Why do Americans write "meter" for "metre", " thru" for "through",
"dove" for "dived" , "I've gotten" for " I've got", etc, etc?
Somehow I don't think the Pilgrim Fathers brought all that over from
the Old Country!

Americans speak American and we speak English ... 'nuff said!

Peter, G3PHO

3207. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 21:18:46 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10kc3lpj7ld7pbe@corp.supernews.com>
Source record: 89528

The input resistance of 1.5 ohms you quote implies an extremely good ground system. I suspect that very few people, particularly ones putting up such a short vertical for 160, have the room for that elaborate a system. As ground loss increases, the fractional loss caused by the inductor decreases. So I don't agree with your blanket statement that an inductor with a Q of 1000 will lose that fraction of the power. It might, if a person had an extremely elaborate ground system, but not otherwise.

Incidentally, although 30% power loss sounds impressive, it'll reduce the signal less than 1.6 dB.

So it won't be worthwhile for most people to make heroic efforts to produce extremely high Q loading inductors. (And, even if they can make one with a Q of 1000, it would have to somehow be suspended well above the ground and away from other conductive objects in order to retain that sort of Q.)

Roy Lewallen, W7EL

Frank wrote:

> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:10kbomu7lrbdaf5@corp.supernews.com...
>
>>Frank wrote:
>>
>>>Also the series inductor should have a very high Q for 160 m. A Q of
>
> 1000
>
>>>will loose about 30% of your power.
>>
>>Can you tell us how you calculated this? How much ground loss did you
>>assume?
>>
>>Roy Lewallen, W7EL
>
>
> I have run a number of NEC models (NEC-Win Pro), for ground mounted
> verticals with a radial system, using the Sommerfeld/Norton ground models
> (usually in the range of: Sigma = 0.02 S/m Er = 17) -- although not for the
> specific dimensions indicated. My models would be approximately 0.001
> wavelengths above ground (as per Cebik: Basic Antenna Modeling). The input
> impedance calculated is of the order of 1.5 - j1500. From these data it is
> relatively trivial to estimate the required Q of a series inductor.

>
> I have been very interested in such antennas, but have never actually gotten
> around to building -- just modeling! If the original poster is interested,
> I would be very happy to model the specific dimensions.
>
> Frank Meredith (VE6CB)
>
>
>
>
>

3208. Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 21:21:01 UTC
From: jgboyles@aol.com
Message-ID: <20040913172101.22107.00003470@mb-m07.aol.com>
Source record: 89529

Hi,
I am contemplating a pep reading wattmeter so I can check the output of my HB amplifier. Consequently, I am putting it right on the output of the amp. The output of the amp should always see 50 ohms because it will be feeding either a 50 ohm dummy load, or an ATU tuned to 50 ohms. With that in mind, I am simply using a resistive voltage divider, to get a voltage sample, and squaring it with an AD633 multiplier. This seems like a simple, cheap way to get watt info. assuming you will always be working into a near 50 ohm resistive load. Anyone see any reason why this will not give you a pretty good indication of your power output? I realize that the load may not always be exactly 50 ohms, and that there are losses in the ATU.
The reason I have not tried getting a current sample and using the conventional VI COS Theta with the multiplier is due to the additional complexity of circuitry. It is also difficult to get accurate current samples over a wide frequency range. By making everything resistive it somewhat takes the frequency dependency out of the problem. Thanks.
73 Gary N4AST

3209. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 21:25:11 UTC
From: Brian Reay <brian.reay@bigfoot.com>
Message-ID: <2qmhh7F11fi6gU1@uni-berlin.de>
Source record: 89530

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:41460964.215847271@news.blueyonder.co.uk...
> On Mon, 13 Sep 2004 16:38:15 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >We speak English, not an adaptation
> >of it
>
> I beg to differ!
>
> I don't think the word "Hi" is English yet it's the ubiquitous
> greeting in the US (and unfortunately over here in the UK also).
> Why do Americans write "meter" for "metre", " thru" for "through",
> "dove" for "dived" , "I've gotten" for " I've got", etc, etc?
> Somehow I don't think the Pilgrim Fathers brought all that over from
> the Old Country!
>
> Americans speak American and we speak English ... 'nuff said!
>

I recommend Bill Bryson's book "Made in America"- a very readable account of
how American English has developed, with bits of the development of English
English thrown in.

Even in England, English usuage isn't universal. At least, after nearly 28
years in "the south", I still speak proper English ;-)

(Drifting off topic.....)

--
Brian Reay
www.g8osn.org.uk
www.amateurradiotraining.org.uk
FP#898

3210. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 22:30:11 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <Tbp1d.5013$KU5.28@edtnps89>
Source record: 89531

Yes, agree with everything you say. I have measured my ground conductivity as 50 mS/m, so it is possible I used that figure to arrive at the results. Much of Alberta and Montana have very high ground conductivity in the order of 15 - 40 mS/m (Reference Data for Radio Engineers, 6th ed, pp 30-7, 30-8). I must admit to being fixated on super high Q inductors to minimize matching network losses. Your figure of 1.6 dB loss with a Q of 1000 -- based on a 1.5 Ohm resistance is of course correct. Just the same I plan to model the vertical, as described in the original post, and see what I get for various soil conditions, and the loss effects of some typical Qs. I know it has all been done before, but enjoy doing it just for fun.

Frank Meredith (VE6CB)

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10kc3lpj7ld7pbe@corp.supernews.com...
> The input resistance of 1.5 ohms you quote implies an extremely good
> ground system. I suspect that very few people, particularly ones putting
> up such a short vertical for 160, have the room for that elaborate a
> system. As ground loss increases, the fractional loss caused by the
> inductor decreases. So I don't agree with your blanket statement that an
> inductor with a Q of 1000 will lose that fraction of the power. It
> might, if a person had an extremely elaborate ground system, but not
> otherwise.
>
> Incidentally, although 30% power loss sounds impressive, it'll reduce
> the signal less than 1.6 dB.
>
> So it won't be worthwhile for most people to make heroic efforts to
> produce extremely high Q loading inductors. (And, even if they can make
> one with a Q of 1000, it would have to somehow be suspended well above
> the ground and away from other conductive objects in order to retain
> that sort of Q.)
>
> Roy Lewallen, W7EL
>
> Frank wrote:
>
> > "Roy Lewallen" <w7el@eznec.com> wrote in message
> > news:10kbomu7lrbdaf5@corp.supernews.com...
> > >
> >>Frank wrote:
> >>
> >>>Also the series inductor should have a very high Q for 160 m. A Q of
> > >
> > 1000

> >
> >>>will loose about 30% of your power.
> >>
> >>Can you tell us how you calculated this? How much ground loss did you
> >>assume?
> >>
> >>Roy Lewallen, W7EL
> >
> >
> > I have run a number of NEC models (NEC-Win Pro), for ground mounted
> > verticals with a radial system, using the Sommerfeld/Norton ground
models
> > (usually in the range of: Sigma = 0.02 S/m Er = 17) -- although not for
the
> > specific dimensions indicated. My models would be approximately 0.001
> > wavelengths above ground (as per Cebik: Basic Antenna Modeling). The
input
> > impedance calculated is of the order of 1.5 - j1500. From these data it
is
> > relatively trivial to estimate the required Q of a series inductor.
> >
> > I have been very interested in such antennas, but have never actually
gotten
> > around to building -- just modeling! If the original poster is
interested,
> > I would be very happy to model the specific dimensions.
> >
> > Frank Meredith (VE6CB)
> >
> >
> >
> >
> >

3211. Re: Horizontal Omni Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 23:07:31 UTC
From: David Winfrey <nospam@example.com>
Message-ID: <10kca1j7q8kdd52@corp.supernews.com>
Source record: 89532

Matt <nospam.hciss@yahoo.com> wrote:
: Does anyone know of any pointers on how to construct a horizontal omni
: antenna in the 900Mhz to 5.8Ghz? Not wide band like that just something
: that works somewhere in there. Just real curious how horizontal omnis work
: and would like to experiment with one somewhere in that band.

Now and then I see an antenna that looks like a folded dipole,
bent into an S shape. I believe these are for omnidirectional
FM broadcast reception. Does anyone know if these are good
for 2-meter SSB?

David Winfrey
KB3ICR

3212. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 23:10:11 UTC
From: jgboyles@aol.com
Message-ID: <20040913191011.25764.00000671@mb-m07.aol.com>
Source record: 89533

>Also the series inductor should have a very high Q for 160 m. A Q of 1000
>will loose about 30% of your power.

That's all well and good, but he wants to work over a wide frequency range.
Any L network will be a compromise. The Q as well as many other parameters
will have to be considered.

73 Gary N4AST

3213. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 23:14:17 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10kcadv1j0gh54a@corp.supernews.com>
Source record: 89534

boy....from what I have been reading it looks like I would be miles ahead
using my twin lead fed 80 meter doublet...either as a very short dipole or
top loaded vertical on 160
"Frank" <ve6cb@telus.net> wrote in message
news:w7n1d.147$t61.135@clgrps13...
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0409131120.4a897a08@posting.google.com...
>> I doubt that the coil will have a Q of more than 300 if that !
>> Art
>>
>>
>>
>>
>>
>> "Frank" <frank599@telus.net> wrote in message
> news:<JCe1d.97059$jZ5.12695@clgrps13>...
>> > "denton" <denton@oregontrail.net> wrote in message
>> > news:10k48almvc5ui2e@corp.supernews.com...
>> > > Hi all...
>> > > I am starting to work on something to use on 160 thru 20 meters.
>> > > I currently have an aluminum mast that is 32 ft long with a small cap
> hat
>> > on
>> > > top.
>> > > the antenna will sit in the center of an area approx 50 z 50'
> (backyard).
>> > I
>> > > plan to put down 40 plus radials, the majority which will be situated
> to
>> > > radiate out from the base of the vertical.
>> > > some will meander along the house foundation and property line..
>> > > I plan on also tying in the galvanized (not chain link) fence around
> the
>> > > back yard to the radial system, as well as the house plumbing.
>> > > 40 meters should be direct feed.
>> > > I will homebrew a matching L network for use on 160 thru 60 meters.
>> > > I will also try a 20 meter tuning stubb.
>> > > Does anyone know what the size of the loading coil that MFJ uses in
> their
>> > 80
>> > > & 40 meter vertical?
>> > > I have read of just about everything I can find online of this sort
>> > > of
>> > > project and have played with Eznec demo a bit and think this will be

>> > > a
>> > > doable project.
>> >
>> > Also the series inductor should have a very high Q for 160 m. A Q of
> 1000
>> > will loose about 30% of your power.
>> >
>> > Frank
>
> Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53. I
> have
> written a program In MathCAD Pro, which indicates a coil made from 1/4"
> copper pipe, 12" long, and 3 inches diameter has an inductance of 39 uH
> and
> a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q of
> 1600). To be honest I have never built such a coil, and it would probably
> be very difficult to measure. I agree that typical "Airdux" coils have a
> Q
> in the range of 300 or so.(Silver plating, or gold, would also be
> desirable
> to prevent lossy copper oxide build up). Anyway if you are interested I
> can send you the MathCAD file. I would be very happy if somebody could
> check
> my math. It think the point I was trying to make it that electrically
> short
> antennas have such a low real input impedance that building an efficient
> matching network is challenging to say the least. Even if such networks
> are
> feasible the huge voltages developed at the base could prove to be a
> problem.
>
> 73,
>
> Frank
>
>

3214. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 23:29:25 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <p3q1d.87214$3l3.17942@attbi_s03>
Source record: 89535

"Jim" <kc7jfv@hotmail.com> wrote in message
news:781c67d2.0409111749.72e61a30@posting.google.com...
>I know this is amateur group but I thought you guys will have some answer.
> Got a unused TV yagi antenna with about 12 directors, dipole, and a
> reflector.
> Want to hook up a 300 ohm cable to my Sony 2010 receiver FM input. Do I
> need to
> hook up a balun? If yes, would a 75 ohm be good enough? OR should I just
> forget
> about this plan? TIA.

Jim -

Let's get back to your query. The broadcast FM band (88MHz to 108 MHz) is
just above Broadcast TV Channel 6 ... so a TV yagi antenna designed for
low-band VHF TV (Channel 2 - 6) or specifically for Channel 6 will do quite
well.

The civil and commerical airband starts above the FM allocation (108 MHz to
136.975MHz) to the beginning of the commerical VHF allocation (136 - 168),
Channel 7 is at 174 MHz

Here is some pertient inforamtion from Bob Colegrove and an older German
posting about this Sony radio Sony 2001D (also known as the Sony ICF-2010).

Bob Colegrove's document Coupling MW and LW antennas to the Sony ICF-2010
http://www.sdxf.org/alfa/dxinfo/coupling_MW_and_LW_antennas_to_the_Sony_ICF_2010.pdf

Building an Antenna mathcing device
http://www.hard-core-dx.com/nordicdx/antenna/special/2010ant.html

About the antenna circuit and external antennas
The following information is from an older posting,
<38EB4AAD.7C7D5EC6@yahoo.com>:

1.. The ext. antenna socket is "hot", i.e. powered through a 470 ohm
resistence + 100 uH coil. This means that it will deliver approx. 10 mA DC
current to the external antenna circuit. The coil is to prevent "polluting"
the power circuit of the radio with radio frequency signal. Evidently, the
purpose of this arrangement is to "inform" the accessory antenna when the
radio is turned on. In case of the Sony AN-LP1 it turns on the antenna
without need to use the antenna power switch. However, the 7600G will NOT
power the antenna, the 10 mA are not enough to power the amplifier circuit.
The power for the AN-LP1 comes from its own batteries. You can use this
feature with any active antenna by including a proper power-up circuit - a
nice feature if your active antenna is located far away from the radio and
you want it to turn on and off automatically when you use your radio.

2.. You can connect any other antenna (provided it is correctly designed and installed) to the EXT ANT socket without risking to damage the radio. However, if the external antenna circuit has low DC resistence, it will drain some current from the radio. Therefore, you will experiment slightly higher power consumption from your batteries (up to 10% at normal listening volume). You can avoid this current drain by including a small ceramic capacitor (1000 pF) in series with the antenna circuit, however I don't think it is really necessary.
3.. The 7600G has some basic protection build into the EXT ANT input circuit. Any static buid-up will be drained off via the power circuit mentioned in point 1. It also includes a diode pair (1SS123) to protect the input RF amplifier FET from damage due to too strong signals or an accidental connection of the antenna to a low voltage AC source. IT IS NOT A SUBSTITUTE FOR A PROPER ANTENNA GROUNDING AND LIGHTNING PROTECTION IF YOU USE AN EXTERNAL ANTENNA - YOU STILL NEED TO PROPERLY GROUND YOUR EXTERNAL ANTENNA AND PROTECT YOUR RADIO, but it builds some margin of safety to protect the front-end FET - a common problem with the Sony 2001D (2010).
HOW TO DETECT AND REPAIR THE COMMONLY BLOWN TRANSISTOR IN THE SONY 2010
Michael Covington, N4TMI
http://qex.net.tripod.com/mods/sony/mods/sony.txt

Modifications
http://www.qsl.net/wd8das/2010.html

Sony 7600 series radio page
http://stephan.win31.de/sony7600.htm

What ever happen to TV Channel 1 ?
http://members.aol.com/jeff560/tvch1.html

w9gb

3215. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-13 23:46:17 UTC
From: dplatt@radagast.org
Message-ID: <10kcca9rst1ks19@corp.supernews.com>
Source record: 89536

In article <p3q1d.87214$3l3.17942@attbi_s03>,
G.Beat <reply@newsgroup.only> wrote:

>Jim -
>
>Let's get back to your query. The broadcast FM band (88MHz to 108 MHz) is
>just above Broadcast TV Channel 6 ... so a TV yagi antenna designed for
>low-band VHF TV (Channel 2 - 6) or specifically for Channel 6 will do quite
>well.

As I understand it, the typical low-band or full-band VHF
television antenna is almost always a log-periodic, rather than a
Yagi. Yagi antennas having a substantial amount of gain are rather
narrow-banded, and won't cover the whole low-band VHF subband
properly. Log-periodics have only a limited amount of gain, but can
have a much wider bandwidth.

I think the only VHF-TV-band Yagi antennas I've seen were
single-channel types.

A full-VHF-band (channels 2 - 13) log-periodic antenna should work
very well on the broadcast FM band, unless it has a built-in FM trap
that cannot be defeated.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3216. Re: Horizontal Omni Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 00:02:50 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <Yxq1d.137082$_h.81493@bignews3.bellsouth.net>
Source record: 89537

try a folded dipole turnstile

"Matt" <nospam.hciss@yahoo.com> wrote in message
news:10kbilfsq70t6a4@corp.supernews.com...
> Does anyone know of any pointers on how to construct a horizontal omni
> antenna in the 900Mhz to 5.8Ghz? Not wide band like that just something
> that works somewhere in there. Just real curious how horizontal omnis
work
> and would like to experiment with one somewhere in that band.
>
> Matt
>
>

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.754 / Virus Database: 504 - Release Date: 9/6/2004

3217. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 00:43:24 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409131643.15774360@posting.google.com>
Source record: 89538

Mark
In the 1600s the prime point of departure was the West India Docks in
London. East India docks were for Australia. Actual records of
passengers
have been put on the computor by the Mormans.During those times seamen
were very prone to accidents and on reaching the U.S. were not hired
for the return trip. Many of these such as those with broken limbs
stayed in the U.S. when they were healed and headed into the far lands
and became trappers and traders. There are stories of some that made
good along the Mississippi and even had towns named after them (
Gaylsburg I think was one of them) The point that I am making is that
not all were emigrating passengers because many missed the boat for
the return trip for one reason or another. As for the person who
thought his clan came from Glasgow that was a real surprise to me as
we normally just called them Catholic or Protestant "gangs" Most of
the Scots that were pushed out of the Highland Light Infantry finished
up in my part of the military and certainly gave credence to the
stories of Glasgow and the Goballs. One member from Glasgow asked if I
would write a letter for him to get reinstatement to a soccer leave.
He told me he was suspended "sine die" to which I asked why.Apparently
he knocked the referee cold after an augument on the fielde. I
declined to write the letter expressing his remorse.
Art

@wt.net (Mark Keith) wrote in message
news:<25eb70d7.0409122206.462567b3@posting.google.com>...
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> >
> > I think serious family research work would have to begin at home in the
> > States.
>
> I've found the hardest part is linking the old scottish family history
> with the later U.S. history. It seems many fled Scotland for various
> reasons during the years, 1600-1700's, and records are scarce. I have
> pretty good records of the Scotland Keith's, and I have traced my U.S.
> history back to appx 1790-1810 VA., but can't find links to trace back
> to Scotland. So it's like a missing gap. But there are pay sources
> with possibly more info that I haven't checked yet. "IE: ship records,
> etc".
> There were Keiths in New England "MA." as early as the 1600's, but I
> seem to be linked more to a VA. point of entry from the records I've
> seen so far. The old Keith history in Scotland is quite well known as
> they were quite a cast of characters, but it's like it hits a brick
> wall at the point the various family branches came to the U.S. Hard to

> link the two in many cases, unless you really scour all sources. Also
> early U.S. history and documents can be meager to nil. Myself, I hit
> the brick wall at the end of the 1700's. 1800 onward, I'm pretty
> solid. I've traced back to my g-g-g-g-grandfather just using the web.
> Back into the 1700's is meager. So even though I'm most likely related
> to some of the old big wheels in Scotland, I have no idea which line I
> would come from. There are so many lines....The 1700's must have been
> a rough time in Scotland for a family with the land and general wealth
> the old Keith clan had, to decide to split up and split town for the
> new world.
>
> A visit to Edinburgh would be more profitable than a vist to London
> > during a holiday visit.
>
> Most of the Keith clan was centered around Aberdeen. They founded one
> of the old colleges there, and Dunottar castle is the old Keith family
> castle. Mel Gibson filmed certain parts of "Hamlet" at that castle. Or
> whats left of it anyway...It's in ruins now...
> >
> > Another visit to a high-class tailor whilst in Edinburgh on holiday would
> > eventually fit you up with a genuine Maxwell tartaned kilt. I expect you
> > know that a kilt is a heavy, pleated, woven skirt, with a sporan to contain
> > your loose cash, under which is nothing in the way of clothing. Many
> > Scotsmen still wear them and not on ceremonial occsions. Furthermore,
> > Scotswomen are proud to be so accompanied.
>
> I'm not much for skirts myself. Rednecks in Texas generally don't wear
> them..:/
> But there is a Keith clan, family tarton, coat of arms, etc, etc...Our
> tarton is kind of a green/blue plaid mix...
>
> One story of the early Scotland Keiths can be found at:
> http://www.thekeithclan.com/
>
> Kind of interesting...We have a pretty colorful history, but not all
> is that good...
> There was a long running feud with another clan due to some acts
> involving some of the Keiths..Resulted in the death of a girl one of
> the Keiths fancied..."kinda long story, but it can be found on the
> net. "That started a feud which lasted for many, many years. I think
> it just recently finally ended with both clans finally getting
> together and forming a truce.. MK

3218. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 00:55:15 UTC
From: CW <"no adddress"@spam>
Message-ID: <u_ydnYqc1JPv3NvcRVn-iA@comcast.com>
Source record: 89539

No, they have made many improvements over the years.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:2qmhh7F11fi6gU1@uni-> > Somehow I don't think the Pilgrim Fathers
brought all that over from
> > the Old Country!

3219. Re: 106.9MHz notch filter

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 01:15:22 UTC
From: A-Tech <atech@austin.rr.com>
Message-ID: <KCr1d.290$ES6.148@fe1.texas.rr.com>
Source record: 89540

Hi, Mario

Thank you for this response.

Of all the replies that I received, you came closest to the information I
was looking for.

Even those recommending "phased arrays" failed to point me toward practical
information.

I have the tech-savy to build the circuits shown in your link and to
understand the theory.

Thanks again.

...Bryce

> "A-Tech" <atech@austin.rr.com> wrote in message
> >
> > I am a newbie here and have just dropped in to ask a single technical
> > question.
> >
> > Living as I do in a suburban area, I use an FM antenna to draw the
> stations located in a certain vector from me. A station of interest is
located at 107.1MHz
> but is interfered with by an off-axis stronger signal at 106.9MHz
> >
> Hi Bryce,
>
> you can try phase cancellation technique as described at
> http://www.geocities.com/toddemslie/phase_cancellation.htm
>
> Good luck!
>
> Mario 9A4DE

3220. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 01:38:13 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci5i25rvh1@sparta.btinternet.com>
Source record: 89541

The most accurate way of measuring power is to measure volts across a known resistance.

3221. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 01:56:07 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <41464fb7$0$74189$39cecf19@news.twtelecom.net>
Source record: 89542

JGBOYLES wrote:

> Hi,
> I am contemplating a pep reading wattmeter so I can check the output of my HB
> amplifier. Consequently, I am putting it right on the output of the amp. The
> output of the amp should always see 50 ohms because it will be feeding either a
> 50 ohm dummy load, or an ATU tuned to 50 ohms. With that in mind, I am simply
> using a resistive voltage divider, to get a voltage sample, and squaring it
> with an AD633 multiplier. This seems like a simple, cheap way to get watt
> info. assuming you will always be working into a near 50 ohm resistive load.
> Anyone see any reason why this will not give you a pretty good indication of
> your power output? I realize that the load may not always be exactly 50 ohms,
> and that there are losses in the ATU.
> The reason I have not tried getting a current sample and using the
> conventional VI COS Theta with the multiplier is due to the additional
> complexity of circuitry. It is also difficult to get accurate current samples
> over a wide frequency range. By making everything resistive it somewhat takes
> the frequency dependency out of the problem. Thanks.
> 73 Gary N4AST

Good luck getting a straight answer here, and I won't try one, because
every technical answer related to power transfer is always wrong by
someone elses measure on this list.

That being said, I'd do it the way you propose, since it's simple and
repeatable, and probably close enough.

tom
K0TAR

3222. Re: Yagi antenna for FM/AIR reception

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 02:00:24 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <Ygs1d.189154$mD.76531@attbi_s02>
Source record: 89543

"Dave Platt" <dplatt@radagast.org> wrote in message
news:10kcca9rst1ks19@corp.supernews.com...
> In article <p3q1d.87214$3l3.17942@attbi_s03>,
> G.Beat <reply@newsgroup.only> wrote:
>
>>Jim -
>>
>>Let's get back to your query. The broadcast FM band (88MHz to 108 MHz) is
>>just above Broadcast TV Channel 6 ... so a TV yagi antenna designed for
>>low-band VHF TV (Channel 2 - 6) or specifically for Channel 6 will do
>>quite
>>well.
>
> As I understand it, the typical low-band or full-band VHF
> television antenna is almost always a log-periodic, rather than a
> Yagi. Yagi antennas having a substantial amount of gain are rather
> narrow-banded, and won't cover the whole low-band VHF subband
> properly. Log-periodics have only a limited amount of gain, but can
> have a much wider bandwidth.
>
> I think the only VHF-TV-band Yagi antennas I've seen were
> single-channel types.
>
> A full-VHF-band (channels 2 - 13) log-periodic antenna should work
> very well on the broadcast FM band, unless it has a built-in FM trap
> that cannot be defeated.
>
> --
> Dave Platt

Dave -

I nice thing about growing up 60 to 90 miles from VHF & UHF TV stations (and not that far from Burlington, IA where Winegard still makes the antennas - and AntennaCraft is next door - where Radio Shack OEMs their antennas) is that you learn about fringe and deep fringe TV antennas -- and the Radio/TV stores tried ALL of the types mfg. by Winegard, Jerrold, ChannelMaster, etc.

When Jim mentioned a dipole, reflector and 12 directors ... I have seen this on a long boom yagi (just like the 2 meter 11 to 18 element antennas) and as a log-periodic.

A photo is worth a thousand words.

greg

3223. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 03:03:34 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <act1d.11266$XP3.3819@edtnps84>
Source record: 89544

Could be, but short dipoles can also be difficult to match, although as long as you do not go below a quarter wave it should be reasonably ok. Even with 450 Ohm ladder line the losses can sometimes be very high, not to mention the tuner losses, and, like the vertical, very high voltages.

The thing I like about verticals is the excellent low angle radiation. I have been playing around with NEC models of 32 ft verticals all evening, but not satisfied with the results yet. Roy Lewallen makes some good points, so you may not need to build a 2 ft long gold plated coil yet! Somebody else also pointed out that you want to use the vertical on other bands, which will make for a complicated tuner. I have been trying to make up my mind about 160 m antennas for about a year, still not sure what I want to do.

Frank Meredith (VE6CB)

"denton" <denton@oregontrail.net> wrote in message
news:10kcadv1j0gh54a@corp.supernews.com...
> boy....from what I have been reading it looks like I would be miles ahead
> using my twin lead fed 80 meter doublet...either as a very short dipole or
> top loaded vertical on 160
> "Frank" <ve6cb@telus.net> wrote in message
> news:w7n1d.147$t61.135@clgrps13...
> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0409131120.4a897a08@posting.google.com...
> >> I doubt that the coil will have a Q of more than 300 if that !
> >> Art
> >>
> >>
> >>
> >>
> >>
> >> "Frank" <frank599@telus.net> wrote in message
> > news:<JCe1d.97059$jZ5.12695@clgrps13>...
> >> > "denton" <denton@oregontrail.net> wrote in message
> >> > news:10k48almvc5ui2e@corp.supernews.com...
> >> > > Hi all...
> >> > > I am starting to work on something to use on 160 thru 20 meters.
> >> > > I currently have an aluminum mast that is 32 ft long with a small
cap
> > hat
> >> > on
> >> > > top.
> >> > > the antenna will sit in the center of an area approx 50 z 50'
> > (backyard).
> >> > I

> >> > > plan to put down 40 plus radials, the majority which will be
situated
> > to
> >> > > radiate out from the base of the vertical.
> >> > > some will meander along the house foundation and property line..
> >> > > I plan on also tying in the galvanized (not chain link) fence
around
> > the
> >> > > back yard to the radial system, as well as the house plumbing.
> >> > > 40 meters should be direct feed.
> >> > > I will homebrew a matching L network for use on 160 thru 60 meters.
> >> > > I will also try a 20 meter tuning stubb.
> >> > > Does anyone know what the size of the loading coil that MFJ uses in
> > their
> >> > 80
> >> > > & 40 meter vertical?
> >> > > I have read of just about everything I can find online of this sort
> >> > > of
> >> > > project and have played with Eznec demo a bit and think this will
be
> >> > > a
> >> > > doable project.
> >> >
> >> > Also the series inductor should have a very high Q for 160 m. A Q of
> > 1000
> >> > will loose about 30% of your power.
> >> >
> >> > Frank
> >
> > Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53. I
> > have
> > written a program In MathCAD Pro, which indicates a coil made from 1/4"
> > copper pipe, 12" long, and 3 inches diameter has an inductance of 39 uH
> > and
> > a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q
of
> > 1600). To be honest I have never built such a coil, and it would
probably
> > be very difficult to measure. I agree that typical "Airdux" coils have
a
> > Q
> > in the range of 300 or so.(Silver plating, or gold, would also be
> > desirable
> > to prevent lossy copper oxide build up). Anyway if you are interested
I
> > can send you the MathCAD file. I would be very happy if somebody could
> > check
> > my math. It think the point I was trying to make it that electrically
> > short
> > antennas have such a low real input impedance that building an efficient

> > matching network is challenging to say the least. Even if such networks
> > are
> > feasible the huge voltages developed at the base could prove to be a
> > problem.
> >
> > 73,
> >
> > Frank
> >
> >
>
>

3224. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 03:26:26 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409131926.5fd9711f@posting.google.com>
Source record: 89545

Tom W8JI talks about coils on his page and
if my memory is correct he has never measured a Q beyond 300
I use the 200/300 figure for my modelling and use as much as 800/1000
for capacitors. I am not competant enough to do any checking
of your particular program but I suspect your answers are in error
and await guru comments with interest
Art

"Frank" <ve6cb@telus.net> wrote in message news:<w7n1d.147$t61.135@clgrps13>...
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0409131120.4a897a08@posting.google.com...
> > I doubt that the coil will have a Q of more than 300 if that !
> > Art
> >
> >
> >
> >
> >
> > "Frank" <frank599@telus.net> wrote in message
> news:<JCe1d.97059$jZ5.12695@clgrps13>...
> > > "denton" <denton@oregontrail.net> wrote in message
> > > news:10k48almvc5ui2e@corp.supernews.com...
> > > > Hi all...
> > > > I am starting to work on something to use on 160 thru 20 meters.
> > > > I currently have an aluminum mast that is 32 ft long with a small cap
> hat
> on
> > > > top.
> > > > the antenna will sit in the center of an area approx 50 z 50'
> (backyard).
> I
> > > > plan to put down 40 plus radials, the majority which will be situated
> to
> > > > radiate out from the base of the vertical.
> > > > some will meander along the house foundation and property line..
> > > > I plan on also tying in the galvanized (not chain link) fence around
> the
> > > > back yard to the radial system, as well as the house plumbing.
> > > > 40 meters should be direct feed.
> > > > I will homebrew a matching L network for use on 160 thru 60 meters.
> > > > I will also try a 20 meter tuning stubb.
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> their
> 80

> > > > & 40 meter vertical?
> > > > I have read of just about everything I can find online of this sort of
> > > > project and have played with Eznec demo a bit and think this will be a
> > > > doable project.
> > >
> > > Also the series inductor should have a very high Q for 160 m. A Q of
> 1000
> > > will loose about 30% of your power.
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> > > Frank
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> Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53. I have
> written a program In MathCAD Pro, which indicates a coil made from 1/4"
> copper pipe, 12" long, and 3 inches diameter has an inductance of 39 uH and
> a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q of
> 1600). To be honest I have never built such a coil, and it would probably
> be very difficult to measure. I agree that typical "Airdux" coils have a Q
> in the range of 300 or so.(Silver plating, or gold, would also be desirable
> to prevent lossy copper oxide build up). Anyway if you are interested I
> can send you the MathCAD file. I would be very happy if somebody could check
> my math. It think the point I was trying to make it that electrically short
> antennas have such a low real input impedance that building an efficient
> matching network is challenging to say the least. Even if such networks are
> feasible the huge voltages developed at the base could prove to be a
> problem.
>
> 73,
>
> Frank

3225. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 03:40:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3jpck0dqq31ea7potppavi6h4ic15s8l8s@4ax.com>
Source record: 89546

On Mon, 13 Sep 2004 20:09:00 GMT, "Frank" <ve6cb@telus.net> wrote:

>Silver plating, or gold, would also be desirable
>to prevent lossy copper oxide build up

Hi Frank,

Not to raise your hopes on hi Q, but step back and consider: Why would current want to push its way through copper oxide when there is so much conductive copper a micro-inch beneath it? This is like saying insulated wire is non conductive because the plastic layer has so much high resistance that current can't flow.

Copper oxide is only an issue if you are trying to penetrate it for a contact (like in a switch, or a poor connection - tighten the screw).

73's
Richard Clark, KB7QHC

3226. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 04:02:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i9qck0pma3ulfo6ehh7b6j81dqnapjguv6@4ax.com>
Source record: 89547

On 13 Sep 2004 21:21:01 GMT, jgboyles@aol.com (JGBOYLES) wrote:

>I am simply
>using a resistive voltage divider, to get a voltage sample, and squaring it
>with an AD633 multiplier.

Hi Gary,

If you are thinking of Eï¿½/R, you should note this is division, not multiplication. As such you will need an inverter ahead of the first product and then a second multiplier to complete the squaring. Then you would have a problem of dynamic range (not much).

I would suggest you look into turning the voltage into a log representation so you could then have a linear power scale. Adding logs is much simpler form of multiplication too and logs give much more dynamic range. You may lose out in resolution, but if you are driving a common 3ï¿½ digit converter for readout, you can recover that.

73's
Richard Clark, KB7QHC

3227. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 04:31:12 UTC
From: denton <denton@oregontrail.net>
Message-ID: <10kct0656qsll8c@corp.supernews.com>
Source record: 89548

yes...the low angle of radiation is something I have been trying to achieve on 160, but still will allow me to use the vertical efficiently on 20 thru 80 and with a few contacts on 15 thru 10 meters.
It has to work at least as well at its current configuration on 20 meters...which is a 1/4 wave ground plane cut for 20 with 4 radials. Feedpoint is up at 18'. on a grounded aluminum mast.
I have done some more playing with Eznec also and think I can enlarge the capacity hat so that the efficiency is a bit better on 160.
I could always go back to what I used on 160 years ago at the bottom of the sunspot cycle....just feed one side of my 450 ohm twin lead to the ant tuner with as much wire I could bury for radials. The thing was resonant at the upper end of 160 and I did make a few decent contacts.

"Frank" <ve6cb@telus.net> wrote in message
news:act1d.11266$XP3.3819@edtnps84...
> Could be, but short dipoles can also be difficult to match, although as
> long
> as you do not go below a quarter wave it should be reasonably ok. Even
> with
> 450 Ohm ladder line the losses can sometimes be very high, not to mention
> the tuner losses, and, like the vertical, very high voltages.
>
> The thing I like about verticals is the excellent low angle radiation. I
> have been playing around with NEC models of 32 ft verticals all evening,
> but
> not satisfied with the results yet. Roy Lewallen makes some good points,
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> you may not need to build a 2 ft long gold plated coil yet! Somebody else
> also pointed out that you want to use the vertical on other bands, which
> will make for a complicated tuner. I have been trying to make up my mind
> about 160 m antennas for about a year, still not sure what I want to do.
>
> Frank Meredith (VE6CB)
>
>
> "denton" <denton@oregontrail.net> wrote in message
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>> boy....from what I have been reading it looks like I would be miles ahead
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>> top loaded vertical on 160
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>> news:w7n1d.147$t61.135@clgrps13...
>> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message

>> > news:85ed38d.0409131120.4a897a08@posting.google.com...
>> >> I doubt that the coil will have a Q of more than 300 if that !
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>> >> "Frank" <frank599@telus.net> wrote in message
>> > news:<JCe1d.97059$jZ5.12695@clgrps13>...
>> >> > "denton" <denton@oregontrail.net> wrote in message
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>> >> > > Hi all...
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>> > the
>> >> > > back yard to the radial system, as well as the house plumbing.
>> >> > > 40 meters should be direct feed.
>> >> > > I will homebrew a matching L network for use on 160 thru 60
>> >> > > meters.
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>> >> > > & 40 meter vertical?
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>> > 1600). To be honest I have never built such a coil, and it would
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>> > matching network is challenging to say the least. Even if such
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>> > are
>> > feasible the huge voltages developed at the base could prove to be a
>> > problem.
>> >
>> > 73,
>> >
>> > Frank
>> >
>> >
>>
>>
>
>

3228. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 08:08:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci68t2$k3d$1@sparta.btinternet.com>
Source record: 89549

Why complicate matters?

All Gary needs is a diode, a capacitor, a resistor and a micro-ammeter.

3229. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 08:57:17 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0409140057.18ee7f84@posting.google.com>
Source record: 89550

Lots of useful replies - thanks to you all !

Dale W4OP:
>Your best bet for low inductance would probably be the carbon
composition
> ...they look like a perfect cylinder- no bumps on the ends.

Understood! I remember popping resistors that contained a blackish compound throughout the cylindrical body: I assume those were cabon comp.

Also, correct me if I err, they tended to be LARGER that similarly powered resistors that had their heat-generating portion right under the skin.

Dave Platt (dplatt@radagast.org)
>> Or use one of the low-inductance metal-film/metal-foil types.
and Tom Bruhns (k7itm@aol.com)
>> Metal-film and metal-oxide resistors are commonly done
>> as a spiral like the carbon film ones you describe.

I am satisfied that metal film/foil types do not come in rolled-up-foil geometry like some capacitors. This is good - no capacitive bypass. Also, avoids the same temperature gradient / heat dispersal issues of carbon comp.

OTOH, still no guarantee that a metal film resistor is non-inductive.

Cecil Moore (w5dxp@hotmail.com)
>> I have some non-inductive wirewound resistors. They
>> simply reverse the direction of the winding every
>> so often to obtain canceling fields.

I knew they existed, and saw them in catalogs, but never used them.

I have been tempted to use a high power, low resistamce inductive WW resistor as a coil in a regen receiver, just to see how well one can compensate for losses.... I bet both regeneration and tuning will be VERY smooth :(

Tom Bruhns (k7itm@aol.com)
> I've put a couple 100-ohm 2-W metal-oxide resistors
> in parallel, with very short leads, and tested the
> combination for return loss and found it to be better
> than 20dB r.l. (1.22:1 SWR) out to beyond 150MHz.

That pretty much cuts it!

I can easily test my 16 x 100 ohm resistors as a couple of 50 ohm dummy loads on HF. After all, a decent HF match is all I really need, and chances that a low "random" SWR will result if great reactance is added atop resistance is quite modest. Thank you for pointing out the obvious to my obviously obnubilated mind!

Filippo
N1JPR/I2
http://filippo.ru.ru

3230. 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 11:11:37 UTC
From: Alex <no@spam.com>
Message-ID: <hhjdk0ttquhc141n48jsf714vas93rdsnf@4ax.com>
Source record: 89551

I have successfully constructed various 2400 Mhz antennas using the 4nec2 antenna modelling software (really great application, warm tnx to the author should he read this!)

What I would like now is to get a rough idea as to how close I can put the antenna elements to a PVC casing without disturbing the radiation pattern, SWR etc.

E.g. by putting a 2 mm lossless PVC sheet (with dielectricity constant = 7) 1 cm in front of the antenna element.

Is it possible to simulate this?

Alex

3231. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 12:16:01 UTC
From: jgboyles@aol.com
Message-ID: <20040914081601.23955.00000622@mb-m16.aol.com>
Source record: 89552

>Why complicate matters?
>
>All Gary needs is a diode, a capacitor, a resistor and a micro-ammeter.

Hi Reg, Thanks for the reply. That will certainly work, but I would need a Log scale (or is it square) on the micro-ammeter. I want to be read 0-1500watts pep. Down around the 100 watt level things would get crowded. I bought some 3-1/2 digit multimeters from a company here in the US for $3 each. Bought 11 of them. Or I have a 0-1 ma movement that I have re-labeled the meter face to read watts, but it is a linear scale.
73 Gary N4AST

3232. Re: 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 12:38:36 UTC
From: fractenna@aol.com
Message-ID: <20040914083836.03847.00000494@mb-m10.aol.com>
Source record: 89553

>I have successfully constructed various 2400 Mhz antennas using the
>4nec2 antenna modelling software (really great application, warm tnx
>to the author should he read this!)
>
>What I would like now is to get a rough idea as to how close I can put
>the antenna elements to a PVC casing without disturbing the radiation
>pattern, SWR etc.
>
>E.g. by putting a 2 mm lossless PVC sheet (with dielectricity constant
>= 7) 1 cm in front of the antenna element.
>
>Is it possible to simulate this?
>
>Alex
>

Not with a freebie NEC based program.

Also, Why are you using PVC? This stuff is horrible as a base substrate at 2.4 GHz.

73,
Chip N1IR

3233. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 13:17:36 UTC
From: jgboyles@aol.com
Message-ID: <20040914091736.23955.00000625@mb-m16.aol.com>
Source record: 89554

>If you are thinking of Eï¿½/R, you should note this is division, not
>multiplication.

Thanks Richard. What I am thinking is: assuming a perfect 50 ohm load, scale the voltage divider rectifier combo to give 10.0 VDC at full scale watts, 1500 in my case. I now have a relative power indicator as suggested by Reg. I can take care of the squaring and division by putting a Log scale(watts) on a 0-10V analog meter movement. But, what I intend to do is run the voltage divider signal to a multiplier whose output will be V**2/10. If V is 10. volts for 1500 watts then the multipier output will be 10.0 volts. let 10.0 volts equal 1500 watts on the meter scale. Checking another point, assume 500 watts, then the output of the divider will be 5.76 volts, and the output of the multiplier will be 3.33 volts, which is 33% of 10 volts. The wattmeter will read 33% of 1500 or 500 watts. The scale will be linear.
I have not seen it done this way before, although I am sure it has. For this method to accurate your load must be near 50 ohms. The AD633 is a cheap, easy-to-use multiplier chip. Using a +/- 15 VDC supply, it looks like it will have the dynamic range I need.
73 Gary N4AST

3234. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 13:18:31 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <HcC1d.3888$yW6.961@clgrps12>
Source record: 89555

Could not sleep, thinking about all this stuff. Anyway have some data, which I hope agrees with your findings:
32 ft monopole, 32 radials of 25 ft each, 4 spoke capacity hat 6 ft horizontal. At 1.8 MHz.(Model elevated 6" to meet > 0.001 wavelength requirement of NEC). Also highly segmented at 2 segments/ft to get near base for feedpoint.

Perfect Gnd Zin = 2.9 - j880 gain/TO angle = 4.2 dBi <0
Avg. gnd (0.005/13) Zin = 6.7 - j880 gain/TO angle = -2.6 dBi < 25, and -6 dBi < 7
Good gnd (0.01/14) Zin = 4.9 - j880 gain/TO angle = -0.3 dBi < 22, and - 3.5 dBi < 5
V. good gnd (0.03/20) Zin = 4.1 - j880 gain/TO angle = +1dBi < 19, and -2 dBi < 4

Tuner analysis matching 4.9 - j880 Ohms , 1.5 kW input: Series "L", shunt "L". Series "L" = 76.2uH, shunt "L" = 1.9 uH most loss occurs in the series inductor.

Q= 300, 2dB loss, 938 W into antenna (and gnd loss), 550 W loss in series "L", 12.2 kV at antenna base
Q= 1000, 0.72 dB loss, 1.27 kW into antenna (and gnd loss), 224 loss in series "L", 14.2 kV at antenna base

The idea of building a "T" antenna is also very good, being much easier to match, and having very good low angle radiation. Makes me think I should try it!

I guess it shows that attempting to attain a Q of 1000 for a gain of 1.3 dB is pretty pointless. Without actually building such a coil and measuring it I cannot say whether it is possible. I have certainly seen claims of coil construction exhibiting Qs in excess of 1000. Silver plating of coils to prevent copper oxide is pretty much an industry standard. The analysis and proof of why is complicated, but something that sounds interesting. Will get around to it one of these days.

Frank Meredith (VE6CB)

"denton" <denton@oregontrail.net> wrote in message news:10kct0656qsll8c@corp.supernews.com...
> yes...the low angle of radiation is something I have been trying to achieve
> on 160, but still will allow me to use the vertical efficiently on 20 thru
> 80 and with a few contacts on 15 thru 10 meters.
> It has to work at least as well at its current configuration on 20
> meters...which is a 1/4 wave ground plane cut for 20 with 4 radials.

> Feedpoint is up at 18'. on a grounded aluminum mast.
> I have done some more playing with Eznec also and think I can enlarge the
> capacity hat so that the efficiency is a bit better on 160.
> I could always go back to what I used on 160 years ago at the bottom of
the
> sunspot cycle....just feed one side of my 450 ohm twin lead to the ant
tuner
> with as much wire I could bury for radials. The thing was resonant at the
> upper end of 160 and I did make a few decent contacts.
>
> "Frank" <ve6cb@telus.net> wrote in message
> news:act1d.11266$XP3.3819@edtnps84...
> > Could be, but short dipoles can also be difficult to match, although as
> > long
> > as you do not go below a quarter wave it should be reasonably ok. Even
> > with
> > 450 Ohm ladder line the losses can sometimes be very high, not to
mention
> > the tuner losses, and, like the vertical, very high voltages.
> >
> > The thing I like about verticals is the excellent low angle radiation.
I
> > have been playing around with NEC models of 32 ft verticals all evening,
> > but
> > not satisfied with the results yet. Roy Lewallen makes some good
points,
> > so
> > you may not need to build a 2 ft long gold plated coil yet! Somebody
else
> > also pointed out that you want to use the vertical on other bands, which
> > will make for a complicated tuner. I have been trying to make up my
mind
> > about 160 m antennas for about a year, still not sure what I want to do.
> >
> > Frank Meredith (VE6CB)
> >
> >
> > "denton" <denton@oregontrail.net> wrote in message
> > news:10kcadv1j0gh54a@corp.supernews.com...
> >> boy....from what I have been reading it looks like I would be miles
ahead
> >> using my twin lead fed 80 meter doublet...either as a very short dipole
> >> or
> >> top loaded vertical on 160
> >> "Frank" <ve6cb@telus.net> wrote in message
> >> news:w7n1d.147$t61.135@clgrps13...
> >> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> >> > news:85ed38d.0409131120.4a897a08@posting.google.com...
> >> >> I doubt that the coil will have a Q of more than 300 if that !
> >> >> Art

> >> >>
> >> >>
> >> >>
> >> >>
> >> >>
> >> >> "Frank" <frank599@telus.net> wrote in message
> >> > news:<JCe1d.97059$jZ5.12695@clgrps13>...
> >> >> > "denton" <denton@oregontrail.net> wrote in message
> >> >> > news:10k48almvc5ui2e@corp.supernews.com...
> >> >> > > Hi all...
> >> >> > > I am starting to work on something to use on 160 thru 20 meters.
> >> >> > > I currently have an aluminum mast that is 32 ft long with a
small
> > cap
> >> > hat
> >> >> > on
> >> >> > > top.
> >> >> > > the antenna will sit in the center of an area approx 50 z 50'
> >> > (backyard).
> >> >> > I
> >> >> > > plan to put down 40 plus radials, the majority which will be
> > situated
> >> > to
> >> >> > > radiate out from the base of the vertical.
> >> >> > > some will meander along the house foundation and property line..
> >> >> > > I plan on also tying in the galvanized (not chain link) fence
> > around
> >> > the
> >> >> > > back yard to the radial system, as well as the house plumbing.
> >> >> > > 40 meters should be direct feed.
> >> >> > > I will homebrew a matching L network for use on 160 thru 60
> >> >> > > meters.
> >> >> > > I will also try a 20 meter tuning stubb.
> >> >> > > Does anyone know what the size of the loading coil that MFJ uses
> >> >> > > in
> >> > their
> >> >> > 80
> >> >> > > & 40 meter vertical?
> >> >> > > I have read of just about everything I can find online of this
> >> >> > > sort
> >> >> > > of
> >> >> > > project and have played with Eznec demo a bit and think this
will
> > be
> >> >> > > a
> >> >> > > doable project.
> >> >> >
> >> >> > Also the series inductor should have a very high Q for 160 m. A Q
> >> >> > of
> >> > 1000

> >> >> > will loose about 30% of your power.
> >> >> >
> >> >> > Frank
> >> >
> >> > Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53.
I
> >> > have
> >> > written a program In MathCAD Pro, which indicates a coil made from
1/4"
> >> > copper pipe, 12" long, and 3 inches diameter has an inductance of 39
uH
> >> > and
> >> > a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal
Q
> > of
> >> > 1600). To be honest I have never built such a coil, and it would
> > probably
> >> > be very difficult to measure. I agree that typical "Airdux" coils
have
> > a
> >> > Q
> >> > in the range of 300 or so.(Silver plating, or gold, would also be
> >> > desirable
> >> > to prevent lossy copper oxide build up). Anyway if you are
> >> > interested
> > I
> >> > can send you the MathCAD file. I would be very happy if somebody
could
> >> > check
> >> > my math. It think the point I was trying to make it that
electrically
> >> > short
> >> > antennas have such a low real input impedance that building an
> >> > efficient
> >> > matching network is challenging to say the least. Even if such
> >> > networks
> >> > are
> >> > feasible the huge voltages developed at the base could prove to be a
> >> > problem.
> >> >
> >> > 73,
> >> >
> >> > Frank
> >> >
> >> >
> >>
> >>
> >
> >
>

>

3235. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 15:00:10 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <_HD1d.25581$XP3.18559@edtnps84>
Source record: 89556

Another ham in Calgary (VE6WZ, Don't know him) has done some work on high Q coils (http://www.qsl.net/ve6wz/coil.), and provides a link (now dead) to W8JI. My calculations seem to show reasonable agreement with the program he used from K6STI, which does not seem to be available. I would certainly like to see some independent verification of the results. I am tempted to build a coil and measure its Q.

Frank

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
news:85ed38d.0409131926.5fd9711f@posting.google.com...
> Tom W8JI talks about coils on his page and
> if my memory is correct he has never measured a Q beyond 300
> I use the 200/300 figure for my modelling and use as much as 800/1000
> for capacitors. I am not competant enough to do any checking
> of your particular program but I suspect your answers are in error
> and await guru comments with interest
> Art
>
>
>
>
>
>
>
>
> "Frank" <ve6cb@telus.net> wrote in message
news:<w7n1d.147$t61.135@clgrps13>...
> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0409131120.4a897a08@posting.google.com...
> > > I doubt that the coil will have a Q of more than 300 if that !
> > > Art
> > >
> > >
> > >
> > >
> > >
> > > "Frank" <frank599@telus.net> wrote in message
> > news:<JCe1d.97059$jZ5.12695@clgrps13>...
> > > > "denton" <denton@oregontrail.net> wrote in message
> > > > news:10k48almvc5ui2e@corp.supernews.com...
> > > > > Hi all...
> > > > > I am starting to work on something to use on 160 thru 20 meters.
> > > > > I currently have an aluminum mast that is 32 ft long with a small
cap

> > hat
> > on
> > > > > top.
> > > > > the antenna will sit in the center of an area approx 50 z 50'
> > (backyard).
> > I
> > > > > plan to put down 40 plus radials, the majority which will be
situated
> > to
> > > > > radiate out from the base of the vertical.
> > > > > some will meander along the house foundation and property line..
> > > > > I plan on also tying in the galvanized (not chain link) fence
around
> > the
> > > > > back yard to the radial system, as well as the house plumbing.
> > > > > 40 meters should be direct feed.
> > > > > I will homebrew a matching L network for use on 160 thru 60
meters.
> > > > > I will also try a 20 meter tuning stubb.
> > > > > Does anyone know what the size of the loading coil that MFJ uses
in
> > their
> > 80
> > > > > & 40 meter vertical?
> > > > > I have read of just about everything I can find online of this
sort of
> > > > > project and have played with Eznec demo a bit and think this will
be a
> > > > > doable project.
> > > > >
> > > > > Also the series inductor should have a very high Q for 160 m. A Q
of
> > 1000
> > > > > will loose about 30% of your power.
> > > > >
> > > > > Frank
> >
> > Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53. I
have
> > written a program In MathCAD Pro, which indicates a coil made from 1/4"
> > copper pipe, 12" long, and 3 inches diameter has an inductance of 39 uH
and
> > a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q
of
> > 1600). To be honest I have never built such a coil, and it would
probably
> > be very difficult to measure. I agree that typical "Airdux" coils have
a Q
> > in the range of 300 or so.(Silver plating, or gold, would also be
desirable

> > to prevent lossy copper oxide build up). Anyway if you are interested
I
> > can send you the MathCAD file. I would be very happy if somebody could
check
> > my math. It think the point I was trying to make it that electrically
short
> > antennas have such a low real input impedance that building an efficient
> > matching network is challenging to say the least. Even if such networks
are
> > feasible the huge voltages developed at the base could prove to be a
> > problem.
> >
> > 73,
> >
> > Frank

3236. Re: 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 15:23:18 UTC
From: Crazy George <muNnscOh@attSglPobaAl.nMet>
Message-ID: <41470f89_4@news1.prserv.net>
Source record: 89557

Who told you PVC was lossless? Stick a sample of it in a (2.4 GHz) microwave oven and see what happens. You could simulate it with a sheet of carbon impregnated foam, but I guess 4nec2 doesn't handle that either. If you need a radome, use foam polystyrene, commonly known as Styrofoam®.

```
--
Crazy George
Remove N O and S P A M imbedded in return address
"Alex" <no@spam.com> wrote in message news:hhjdk0ttquhc141n48jsf714vas93rdsnf@4ax.com...
> I have successfully constructed various 2400 Mhz antennas using the
> 4nec2 antenna modelling software (really great application, warm tnx
> to the author should he read this!)
>
> What I would like now is to get a rough idea as to how close I can put
> the antenna elements to a PVC casing without disturbing the radiation
> pattern, SWR etc.
>
> E.g. by putting a 2 mm lossless PVC sheet (with dielectricity constant
> = 7) 1 cm in front of the antenna element.
>
> Is it possible to simulate this?
>
> Alex
```

3237. Re: 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 15:48:35 UTC
From: Alex <no@spam.com>
Message-ID: <8m4ek01mduc4fvn1omj205o1707684um37@4ax.com>
Source record: 89558

On 14 Sep 2004 12:38:36 GMT, fractenna@aol.com (Fractenna) wrote:
>Also, Why are you using PVC? This stuff is horrible as a base substrate at 2.4
>GHz.

Because I can get a cheap PVC case which is otherwise suitabel for
weatherproofing the antenna. And because I have seen reported (I have
not tried it myself) that such material does not get heated in a
microwave oven.

The antenna elements themselves are sandwiched between (1 cm)
styrofoam sheets which should be lossless and have a dielectric
constant = 1 (almost). So the antenna elements would not be in direct
contact with the PVC case.

Have you got any other suggestions for a weatherproof case material?

73 & tnx fer ur answer
Alex

3238. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 16:32:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hl5ek01ff2rpnuip6u0vhcc5um5ohgoact@4ax.com>
Source record: 89559

On 14 Sep 2004 13:17:36 GMT, jgboyles@aol.com (JGBOYLES) wrote:

>>If you are thinking of Eï¿½/R, you should note this is division, not
>>multiplication.
>
>Thanks Richard. What I am thinking is: assuming a perfect 50 ohm load, scale
>the voltage divider rectifier combo to give 10.0 VDC at full scale watts, 1500
>in my case.

Hi Gary,

1500W into 50 Ohms yields 274V which you then divide by 27.4 to obtain
10V.

>But, what I intend to do is run the voltage divider
>signal to a multiplier whose output will be V**2/10. If V is 10. volts for
>1500 watts then the multipier output will be 10.0 volts. let 10.0 volts equal
>1500 watts on the meter scale.

As you already have 10V by divider action, what do you need to
multiply? The chip offers two inputs one of which I presume is a
constant 10V? Something is missing here because you are still
dividing and if this through a divider at the output of the
multiplier, then you have jacked the multiplier's output to the rail
BEFORE the division (loss of dynamic range).

>Checking another point, assume 500 watts, then
>the output of the divider will be 5.76 volts,

500W into 50 Ohms yields 158V which you then divide by 27.4 to obtain
5.77V. OK

>and the output of the multiplier
>will be 3.33 volts, which is 33% of 10 volts.

More missing discussion. Like how does 10 ï¿½ 5.77 / 10 = 3.33? The
10's drop out just like before (a useless operation).

>The wattmeter will read 33% of
>1500 or 500 watts. The scale will be linear.

I find it difficult to observe how a non-linear (power) response
becomes linearized without an inverse (log) operation.

> I have not seen it done this way before, although I am sure it has.

Not by your description.

>For this
>method to accurate your load must be near 50 ohms.

That value is immaterial to anything but ONE value of power
representation. The nonlinearity of the response would force you to
have a table of Logs nearby to translate any other reading.

>The AD633 is a cheap,
>easy-to-use multiplier chip. Using a +/- 15 VDC supply, it looks like it will
>have the dynamic range I need.

No, it won't as I've already shown. There is a MUCH better solution
and far cheaper (FREE):
http://www.analog.com/UploadedFiles/Application_Notes/510571309728142264494067 67AN304.pdf

To obtain:
http://www.analog.com/productSelection/orderSamples/index.html

73's
Richard Clark, KB7QHC

3239. Re: 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 16:41:49 UTC
From: Alex <no@spam.com>
Message-ID: <aq7ek0hrkj2vs5ms1i68v088r1i5q2ld54@4ax.com>
Source record: 89560

On Tue, 14 Sep 2004 10:23:18 -0500, "Crazy George"
<muNnscOh@attSglPobaAl.nMet> wrote:

>Who told you PVC was lossless? Stick a sample of it in a (2.4 GHz) microwave oven and see what happens. You could
>simulate it with a sheet of carbon impregnated foam, but I guess 4nec2 doesn't handle that either. If you need a
>radome, use foam polystyrene, commonly known as Styrofoamï¿½.

many tnx for your answer

actually I am using styrofoam already for the indoor model. But
styrofoam is too soft and vulnerable to make weatherproof so I shall
have to put it in a case made of something more rugged.

Evidently 4nec2 does not handle the needed simulation so I shall look
around for other software or maybe make a SWR meter and some practical
experiments...

Alex

3240. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 17:08:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sl7ek0hcvfr1t9vio5s7rat6gf9ekqm3qi@4ax.com>
Source record: 89561

from the revolutionary conceptualist:
"The term radiation resistance is a carry over from the very
early days of radio and was used as a book keeping method to
satisfy at that time the laws of physics."

from the early days (1907) of radio:
R = (1600 ï¿½ hï¿½ / wavelengthï¿½) ï¿½ Ohms

Substituting the known h (12 feet) and the known wavelength (40M) to
"satisfy at that time the laws of physics":
R = 9 Ohms

from the revolutionary conceptualist:
"THE FAILURE MECHANISN WAS ...
FROM IxR LOSS ... EVEN WITH LOW
POWER (100 WATTS)"
....
"THIS MEANS THAT THE HELIX AND THE LOAD COIL WILL NOT
DISSIPATE ANY APPARENT POWER AND THE ONLY POWER
DISSIPATED WILL BE I x R POWER OR JUST THE LOSS OF
POWER CREATED FROM RESISTANCE OF THE LOAD COIL
WINDING. (i. e. resistance of the wire)"

And as for those fraudtenna legal concepts:
"THIS IS PATENT PENDING TECHNOLOGY
...
DOING ANY OF THE ABOVE WILL INFRINGE ON THE PATENT AND RESULT
IN LEGAL CONSEQUENCES FAR GREATER THAN YOU MAY EXPECT"

:-)

3241. Log Periodic yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 18:18:54 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <iCG1d.6250$n%3.363902@twister.southeast.rr.com>
Source record: 89562

I came across plans for a Yagi with a few LPDA elements. What are the advantages of an antenna like this. I figure you are trading gain for bandwidth and there are easier ways to do it than LDPA

3242. Re: pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 18:31:29 UTC
From: Andrey <a8421@intergate.bc.ca>
Message-ID: <10kedph5m12ft7e@corp.supernews.com>
Source record: 89563

PVC is not lossless, however...

I used PVC drainage pipe (white, 3 mm thick maybe) to make radome for 900MHz antenna. Specifically, directional patch arrays. It tuned them down a little bit (2 mm maybe over half-wave length.) I did not measure significant decrease of gain. The cover did not touch the radiator. When it touches, loading get significantly worse.

Andrey

It"Alex" <no@spam.com> wrote in message
news:aq7ek0hrkj2vs5ms1i68v088r1i5q2ld54@4ax.com...
> On Tue, 14 Sep 2004 10:23:18 -0500, "Crazy George"
> <muNnscOh@attSglPobaAl.nMet> wrote:
>
> >Who told you PVC was lossless? Stick a sample of it in a (2.4 GHz)
microwave oven and see what happens. You could
> >simulate it with a sheet of carbon impregnated foam, but I guess 4nec2
doesn't handle that either. If you need a
> >radome, use foam polystyrene, commonly known as Styrofoam�.
>
> many tnx for your answer
>
> actually I am using styrofoam already for the indoor model. But
> styrofoam is too soft and vulnerable to make weatherproof so I shall
> have to put it in a case made of something more rugged.
>
> Evidently 4nec2 does not handle the needed simulation so I shall look
> around for other software or maybe make a SWR meter and some practical
> experiments...
>
> Alex
>
>

3243. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 18:33:40 UTC
From: jgboyles@aol.com
Message-ID: <20040914143340.05436.00000509@mb-m20.aol.com>
Source record: 89564

>1500W into 50 Ohms yields 274V which you then divide by 27.4 to obtain
>10V.
As you already have 10V by divider action, what do you need to
>multiply?

Hi Richard, I want 10.00 VDC to indicate 1500 watts on my 0-10v meter with a linear scale. If I run the 10 volts thru the multiplier (squaring) circuit I get (10)**2/10=10 volts. So far so good, and you don't need a multiplier.
>500W into 50 Ohms yields 158V which you then divide by 27.4 to obtain
>5.77V. OK

If I run 5.77v to my 10 volt full scale meter it will read 5.77/10*1500=865.5 watts which is not 500 watts. However, if I run 5.77 thru my squaring circuit I get (5.77)**2/10=3.33 volts. Now my meter reads 3.33/10*1500=500 watts which is correct.
If you plot the voltage across a 50 ohm resistor vs power V**2/50=power, you get a squared relationship. You can use volts to represent watts only if you scale the meter face correctly. I have seen wattmeters that did this. I believe the Drake model did. 0-100 watts took up the first half of the meter, and 100-1000 watts took up the other half.
If you linearize the voltage by squaring and scaling you get a nice readout with 100 watts being on the left hand side of the meter, and 1500 on the right hand side, and linear in between.
The AD633 probably uses log amps in realization of multiplication, I haven't looked at the internals. I have done multiplication with Log amps. I have to disagree on the AD538 being a better solution. One could use the 538, but the 633 is much simplier to use. Also I already had some AD633s
73 Gary N4AST

3244. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 18:37:53 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <5UG1d.8576$t61.3826@clgrps13>
Source record: 89565

This link http://www.w8ji.com/loading_inductors.htm also seems to confirm my results with estimates for copper tube inductors.

Frank

"Frank" <ve6cb@telus.net> wrote in message
news:_HD1d.25581$XP3.18559@edtnps84...
> Another ham in Calgary (VE6WZ, Don't know him) has done some work on high Q
> coils (http://www.qsl.net/ve6wz/coil.), and provides a link (now dead) to
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> used from K6STI, which does not seem to be available. I would certainly
> like to see some independent verification of the results. I am tempted to
> build a coil and measure its Q.
>
> Frank
>
>
> "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> news:85ed38d.0409131926.5fd9711f@posting.google.com...
> > Tom W8JI talks about coils on his page and
> > if my memory is correct he has never measured a Q beyond 300
> > I use the 200/300 figure for my modelling and use as much as 800/1000
> > for capacitors. I am not competant enough to do any checking
> > of your particular program but I suspect your answers are in error
> > and await guru comments with interest
> > Art
> >
> >
> >
> >
> >
> >
> >
> >
> > "Frank" <ve6cb@telus.net> wrote in message
> news:<w7n1d.147$t61.135@clgrps13>...
> > > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > > news:85ed38d.0409131120.4a897a08@posting.google.com...
> > > > I doubt that the coil will have a Q of more than 300 if that !
> > > > Art
> > > >
> > > >
> > > >

> > > >
> > > >
> > > > "Frank" <frank599@telus.net> wrote in message
> > > news:<JCe1d.97059$jZ5.12695@clgrps13>...
> > > > > "denton" <denton@oregontrail.net> wrote in message
> > > > > news:10k48almvc5ui2e@corp.supernews.com...
> > > > > > Hi all...
> > > > > > I am starting to work on something to use on 160 thru 20 meters.
> > > > > > I currently have an aluminum mast that is 32 ft long with a
small
> cap
> > > hat
> > > on
> > > > > > top.
> > > > > > the antenna will sit in the center of an area approx 50 z 50'
> > > (backyard).
> > > I
> > > > > > plan to put down 40 plus radials, the majority which will be
> situated
> > > to
> > > > > > radiate out from the base of the vertical.
> > > > > > some will meander along the house foundation and property line..
> > > > > > I plan on also tying in the galvanized (not chain link) fence
> around
> > > the
> > > > > > back yard to the radial system, as well as the house plumbing.
> > > > > > 40 meters should be direct feed.
> > > > > > I will homebrew a matching L network for use on 160 thru 60
> meters.
> > > > > > I will also try a 20 meter tuning stubb.
> > > > > > Does anyone know what the size of the loading coil that MFJ uses
> in
> > > their
> > > 80
> > > > > > & 40 meter vertical?
> > > > > > I have read of just about everything I can find online of this
> sort of
> > > > > > project and have played with Eznec demo a bit and think this
will
> be a
> > > > > > doable project.
> > > > > >
> > > > > > Also the series inductor should have a very high Q for 160 m. A Q
> of
> > > 1000
> > > > > > will loose about 30% of your power.
> > > > > >
> > > > > > Frank
> > > >
> > > Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53.

I
> have
> > > written a program In MathCAD Pro, which indicates a coil made from
1/4"
> > > copper pipe, 12" long, and 3 inches diameter has an inductance of 39
uH
> and
> > > a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q
> of
> > > 1600). To be honest I have never built such a coil, and it would
> probably
> > > be very difficult to measure. I agree that typical "Airdux" coils
have
> a Q
> > > in the range of 300 or so.(Silver plating, or gold, would also be
> desirable
> > > to prevent lossy copper oxide build up). Anyway if you are
interested
> I
> > > can send you the MathCAD file. I would be very happy if somebody could
> check
> > > my math. It think the point I was trying to make it that electrically
> short
> > > antennas have such a low real input impedance that building an
efficient
> > > matching network is challenging to say the least. Even if such
networks
> are
> > > feasible the huge voltages developed at the base could prove to be a
> > > problem.
> > >
> > > 73,
> > >
> > > Frank
>
>

3245. Re: Log Periodic yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 19:21:43 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <bxH1d.15578$QJ3.10231@newssvr21.news.prodigy.com>
Source record: 89566

Jimmie wrote:
> I came across plans for a Yagi with a few LPDA elements. What are the
> advantages of an antenna like this. I figure you are trading gain for
> bandwidth and there are easier ways to do it than LDPA
>
>
Sounds like you have found the plans for Oliver Swan's (original Patentee)
antenna. these were mostly made for six meters. K.L.M. , if I remember ,
aquired the patent, then proceeded to produce antennas for vhf, useing
this design. The original reason that he made these for six meters (Swan),
was 2 fold-- one, to improve the bandwidth of the antennas, and two, (remember
this was before cable tv was widely used) to limit TVI(an antenna with a built
in TVI filter !. A consideration for KLM useing this design was additional
bandwidth, consistant foo max gain (high gain antennas are pretty touchy about
gain over bandwidth). Hope this info helps, Jim NN7K

3246. Re: Log Periodic yagi?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 19:35:43 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <jKH1d.19611$SN1.15606@newssvr27.news.prodigy.com>
Source record: 89567

NN7Kex(NOSPAM)k7zfg wrote:

The original reason that he made these for six meters (Swan),
> was 2 fold-- one, to improve the bandwidth of the antennas, and two,
> (remember
> this was before cable tv was widely used) to limit TVI(an antenna with
> a built in TVI filter !. A consideration for KLM useing this design was
> additional bandwidth, consistant foo max gain (high gain antennas are
> pretty touchy about
> gain over bandwidth). Hope this info helps, Jim NN7K

Oh, forgot to explain just HOW the Swan antenna limited TVI !
reason was that the antenna was relatively flat in gain, over 1-2
MHz of six meters. Above around 53 MHz, or below 49MHz, theoretically,
the antenna pattern collapsed, and the swr rose dramatically.
This was what was claimed, If remember the spin from those times! Jim

3247. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 21:37:24 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qp708F11t462U6@uni-berlin.de>
Source record: 89568

Yanklanders are not English Speakers.

In any case, what is all the fuss about? Yankland
regularly invades other countries and subjects their
populations to airborne death. What's sauce for the
gander, etc.

"Jack Painter" <223bthp@cox.net> wrote in message
news:YZk1d.220679$Lj.194476@fed1read03...
> "Airy R. Bean" <me@privacy.net> wrote in message
> news:2qm43jF10fcmgU2@uni-berlin.de...
> > Can't something be done about the erroneous date format?
> > In the English-speaking world, it should read, "11/9/2001"
> We who speak the most English make the rules.
> It has always been "month-day-year" in the United States of America.

3248. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 21:38:12 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qp708F11t462U7@uni-berlin.de>
Source record: 89569

Nobody trusts anything that Tony B.Liar comes out with
unless they have an independently verifiable source of info.

"Bob Miller" <rmiller47@satx.rr.com> wrote in message
news:i0pbk0109d74g34cjualmleofnfu51lrpp@4ax.com...
> On Mon, 13 Sep 2004 18:31:22 +0100, "Airy R. Bean" <me@privacy.net>
> wrote:
>
> >Can't something be done about the erroneous date format?
> >
> >In the English-speaking world, it should read, "11/9/2001"
> >
>
> Eh? When was the last time Tony Blair talked about the events of
> "11-9"?
>
> Bob
> k5qwg
>
>

3249. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 21:39:54 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qp709F11t462U8@uni-berlin.de>
Source record: 89570

But your obsession with bestiality owes more to Yankland than
it does to Britland.

"Brian Reay" <brian.reay@(spamstopper)bigfoot.com> wrote in message
news:2qmhh7F11fi6gU1@uni-berlin.de...
> I recommend Bill Bryson's book "Made in America"- a very readable account
of
> how American English has developed, with bits of the development of
English
> English thrown in.
>
> Even in England, English usuage isn't universal. At least, after nearly 28
> years in "the south", I still speak proper English ;-)
>
> (Drifting off topic...........)
>
> --
> Brian Reay
> www.g8osn.org.uk
> www.amateurradiotraining.org.uk
> FP#898
>
>

3250. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 22:08:51 UTC
From: Nimrod <mighty@hunter.com>
Message-ID: <2qp8fcF11mhptU1@uni-berlin.de>
Source record: 89471

"Airy R. Bean" <me@privacy.net> wrote in message
news:2qp709F11t462U8@uni-berlin.de...
> But your obsession with bestiality owes more to Yankland than
> it does to Britland.
>

Still smarting from you last lost argument with Dr Reay? I guess you've lost
count of them.

3251. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 22:08:54 UTC
From: Nimrod <mighty@hunter.com>
Message-ID: <2qp8ffF11cvucU1@uni-berlin.de>
Source record: 89472

"Airy R. Bean" <me@privacy.net> wrote in message
news:2qp708F11t462U6@uni-berlin.de...
> Yanklanders are not English Speakers.
>
> In any case, what is all the fuss about? Yankland
> regularly invades other countries and subjects their
> populations to airborne death. What's sauce for the
> gander, etc.
>

For anyone who may be interested in the real identity of Airy Bean- look up
G4SDW.

3252. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 22:24:50 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <41496fa3.7396986@news.blueyonder.co.uk>
Source record: 89473

On Mon, 13 Sep 2004 22:25:11 +0100, "Brian Reay"
<brian.reay@(spamstopper)bigfoot.com> wrote:

>Even in England, English usuage isn't universal. At least, after nearly 28
>years in "the south", I still speak proper English ;-)

Why Aye man!!

3253. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 22:28:44 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ci7rfl$k6f$1@newshost.mot.com>
Source record: 89476

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040914143340.05436.00000509@mb-m20.aol.com...
> >1500W into 50 Ohms yields 274V which you then divide by 27.4 to obtain
> >10V.
> As you already have 10V by divider action, what do you need to
> >multiply?

It all works for me in Excel. Squaring the voltage eliminates the need for any log stuff.

E = Root (P*R)

Scaled V is V / 273 but you'll have to go further to stay in the dynamic range of the multiplier. V^2 should be around 10V or whatever the mult can output.

W V scaled V V^2 V^2/10 Output ratio
1500 273.9 10 100 10 1
500 158.1 5.77 33.33 3.33 0.33
100 70.71 2.58 6.67 0.67 0.07

--
Steve N, K,9;d, c. i My email has no u's.

3254. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 22:29:14 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41477251_2@corp.newsgroups.com>
Source record: 89474

Brian Reay wrote:
> Even in England, English usuage isn't universal. At least, after nearly 28
> years in "the south", I still speak proper English ;-)

Yup, wanna amble over yonder directly, down some suds, and cogitate?

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3255. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 22:48:04 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci7sf4onr1@hercules.btinternet.com>
Source record: 89475

"H. Adam Stevens, NQ5H" said -
> Not to diminish Heaviside's contribution, it was Gibb's work that led to
the
> present mathematical expression of Maxwell's equations.
> The Heaviside equation survives to this day as the description of the
> electromagnetic field of a moving charged particle.
> But since Gibbs was American I'm sure you Brits will argue.

==========

I'll allow a wine-assisted imagination to wander around my own history.

I came across Gibbs around 1948 by accident while searching for more information on transmission lines in general. Google had not been invented. He appears to have made his name known (no doubt also in other matters) because of his "Gibb's Phenomenon", an overshoot of some kind in an extension of Fourier's Waveform Analysis. At the time I had no interest in 'overshoots' and forgot all about it. My ignorance about Gibb's other work has continued ever since. I appologise for no mention of his name in connection with tidying up Maxwell's work. And there's no reason at all to resurect the Boston Tea Party.

Heaviside died in solitude in 1925. I was born during a freezing 6-feet deep snow-storm 9 months later. I sometimes like to think there is a spiritual connection.

Mother was a little hard-working woman who took in laundry and clothes-ironing from the slightly better-off classes. Father was a 30-shillings a week iron-bolt header but the national General Strike was imminent. In his spare time he taught himself to drill holes in ebonite panels using a red-hot poker the smell of which began my technical education. But he could solve quadratic equations in his head without the use of pencil and paper or any knowledge of algebraic symbols. I never understood how he did it. Although he lived to the age of 90 he could never explain it himself.

<snip>

Around 1951, as a sideline with other duties, while working in the Engineer-in-Chief's Office of the British Post Office, I first became involved with the location of faults on transmission lines. Then, for a period, I specialised in faults on the then new deep-sea coaxial cables with submerged valve-type repeaters (amplifiers). Transistors were not good or reliable enough.

I worked alone but with the facilities of a shared workshop and staff. My boss was an ex-cable ship Cable Testing Officer, a Ph.D, I think next to the

captain in rank, who always said the only doctor in his family was his brother, a doctor of medicine. His name was Bray and he had the knickname, when not in his company, of "The Vicar".

<snip>

I became involved with reflection coefficients, etc., in the frequency range 0.1Hz up to HF using rectangular-waves and sinewaves. The Dollis Hill, Research Depapartment laboratories (the PO Bell-Labs) made me a 0.1 to 100 Hz, balanced-and-screened output transformer, to be used in a power amplifier, a test signal generator. The amount of 10-thou, mu-metal used in it necessitated a special order being placed on the lamination manufacturer.

I had to make my own precision 0-to-11.111 microfarad, 5-dial, variable capacitor entirely out of specially made polyethylene-dielectric metal-cased capacitors. Absorption with all other dielectrics was far too high at 0.1Hz to make accurate impedance bridge measurements. Mica was awful!

Incidentally, apart from research work, the only occasion this capacitor was used for a practical purpose was to locate a fault on a land cable when I was in Sweden. The embarrassed Swedish engineers were not aware the fault existed. Needless to say I promised aboard the ship on my departure not to include the incident in my report. And I didn't. The Vicar, with his cruel sense of humour, was not altogether happy but for technical political purposes I had him by the balls. He was really a kind fellow and before retirement he ended up as Head of the PO Engineering Training College.

Some years later I had the idea of donating the transformer and capacitor to the Science Museum in London. But some other equally sentimental collector had already stolen them. I sometimes wonder (2004) where they are now.

<snip>

But this is a long way from the much neglected Heaviside.

During the course of my fault location research I ran into a mental blockage. Ultimately, I had to translate the appearance of the reflected waves, as appeared on a 10 second persistance cathode ray tube, a function of time, into miles from one end of the cable. That is all the ship's captain needs to know before he can leave port and set a course. He can then retire to his lonely cabin with a bottle of duty-free scotch if he should so wish.

Eventually I discovered Heaviside's Operational Calculus. Lo and behold, winding the handle on a German mechanical calculating machine, there appeared on a sheet of graph paper the same shaped curves as on the long-persistence CRT. The fault locating equipment was eventually installed at oceanic terminal stations. I had the oportunity to use it on the first breakdown to occur on the relatively short Middlesborough-Gothenburg cable which, as usual, was due to an unknown fishing trawler in the north sea.

All the learned arguments on this newsgroup about SWR, the various reflections and virtual this that and the other, occur because time is

ignored. It is admitted time does complicate matters. But Heaviside sorted transient matters out, versus time, many moons ago.

Reg.

3256. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-14 23:55:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10kf17t7gg8ev75@corp.supernews.com>
Source record: 89477

Reg Edwards wrote:
> . . .
> I came across Gibbs around 1948 by accident while searching for more
> information on transmission lines in general. Google had not been invented.
> He appears to have made his name known (no doubt also in other matters)
> because of his "Gibb's Phenomenon", an overshoot of some kind in an
> extension of Fourier's Waveform Analysis. At the time I had no interest in
> 'overshoots' and forgot all about it. . .
> . . .

It's commonly known that a square wave consists of a sine wave of the square wave's fundamental frequency, plus all its odd harmonics. Specifically, all components are in phase, and their amplitudes are the inverse of the harmonic number. That is, if the amplitude of the fundamenatal sine wave is 1, the amplitude of the third harmonic is 1/3, the amplitude of the fifth harmonic is 1/5, and so forth.

So we should be able to create a square wave by adding all those sine waves -- right?

It turns out that if we add the first few sine wave components, we have a fairly square looking wave -- but it has an overshoot at the leading and trailing edges. As we add more and more harmonics, the result gets more square, and the overshoot gets narrower and narrower -- but it remains, and with the same amplitude. Although the width approaches zero as the number of sine waves you've added gets infinite, there's always an overshoot for any finite number of sine waves.

This is one manifestation of the Gibbs' Phenomenon, which also applies to other situtations. There's a really nifty demo at http://klebanov.homeip.net/~pavel/fb//java/la_applets/Gibbs/.

Roy Lewallen, W7EL

3257. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 02:17:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <4147a7d0_8@corp.newsgroups.com>
Source record: 89479

Bill Turner wrote:
> Has anyone actually tested those over a wide frequency range? I've
> always considered them a witches brew of parasitic capacitance, stray
> coupling between segments and who knows what else.

All I know is that they were mil-spec for HF.

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3258. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 02:18:08 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <ADN1d.1919$n16.572@newsread2.news.atl.earthlink.net>
Source record: 89478

> >I have some non-inductive wirewound resistors. They
> >simply reverse the direction of the winding every
> >so often to obtain canceling fields.
>
> --
>
> Has anyone actually tested those over a wide frequency range? I've
> always considered them a witches brew of parasitic capacitance, stray
> coupling between segments and who knows what else.
>
> On the other hand, maybe they got it just right.
>
> --
> Bill W6WRT
>
I have always thought of them as noninductive at audio frequencies. Much
less as the frequency goes up.

3259. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 03:50:05 UTC
From: aunwin@insightbb.com
Message-ID: <85ed38d.0409141950.775408f1@posting.google.com>
Source record: 89480

Frank, had a quick read thru and obviously I stand corrected.
This is a revised page to that which I read before bui anyway it shows
that my memory is poor.
Many apologies but I have also learned that my figures were way to low
and that I must also review capacitor Q for a single gap as opposed to
multi plates
Regards
Art"

Frank" <ve6cb@telus.net> wrote in message news:<5UG1d.8576$t61.3826@clgrps13>...
> This link http://www.w8ji.com/loading_inductors.htm also seems to confirm my
> results with estimates for copper tube inductors.
>
> Frank
>
>
> "Frank" <ve6cb@telus.net> wrote in message
> news:_HD1d.25581$XP3.18559@edtnps84...
> > Another ham in Calgary (VE6WZ, Don't know him) has done some work on high
> Q
> > coils (http://www.qsl.net/ve6wz/coil.), and provides a link (now dead) to
> > W8JI. My calculations seem to show reasonable agreement with the program
> he
> > used from K6STI, which does not seem to be available. I would certainly
> > like to see some independent verification of the results. I am tempted to
> > build a coil and measure its Q.
> >
> > Frank
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> > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > news:85ed38d.0409131926.5fd9711f@posting.google.com...
> > > Tom W8JI talks about coils on his page and
> > > if my memory is correct he has never measured a Q beyond 300
> > > I use the 200/300 figure for my modelling and use as much as 800/1000
> > > for capacitors. I am not competant enough to do any checking
> > > of your particular program but I suspect your answers are in error
> > > and await guru comments with interest
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> news:<w7n1d.147$t61.135@clgrps13>...
> > > > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > > > news:85ed38d.0409131120.4a897a08@posting.google.com...
> > > > > I doubt that the coil will have a Q of more than 300 if that !
> > > > > Art
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> > > > >
> > > > >
> > > > > "Frank" <frank599@telus.net> wrote in message
> news:<JCe1d.97059$jZ5.12695@clgrps13>...
> > > > > > "denton" <denton@oregontrail.net> wrote in message
> > > > > > news:10k48almvc5ui2e@corp.supernews.com...
> > > > > > > Hi all...
> > > > > > > I am starting to work on something to use on 160 thru 20 meters.
> > > > > > > I currently have an aluminum mast that is 32 ft long with a
> small
> cap
> > > > hat
> > > > on
> > > > > > > top.
> > > > > > > the antenna will sit in the center of an area approx 50 z 50'
> > > > (backyard).
> > > > I
> > > > > > > plan to put down 40 plus radials, the majority which will be
> situated
> to
> > > > > > > radiate out from the base of the vertical.
> > > > > > > some will meander along the house foundation and property line..
> > > > > > > I plan on also tying in the galvanized (not chain link) fence
> around
> the
> > > > > > > back yard to the radial system, as well as the house plumbing.
> > > > > > > 40 meters should be direct feed.
> > > > > > > I will homebrew a matching L network for use on 160 thru 60
> meters.
> > > > > > > I will also try a 20 meter tuning stubb.
> > > > > > > Does anyone know what the size of the loading coil that MFJ uses
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> > > > 80
> > > > > > > & 40 meter vertical?
> > > > > > > I have read of just about everything I can find online of this
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> > > > > > > project and have played with Eznec demo a bit and think this

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> be a
> > > > > > > doable project.
> > > > > > >
> > > > > > > Also the series inductor should have a very high Q for 160 m. A Q
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> > > > > > > will loose about 30% of your power.
> > > > > > >
> > > > > > > Frank
> > > > >
> > > > > Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 - 53.
> I
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> > > > > copper pipe, 12" long, and 3 inches diameter has an inductance of 39
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> and
> > > > > a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a nominal Q
> of
> > > > > 1600). To be honest I have never built such a coil, and it would
> probably
> > > > > be very difficult to measure. I agree that typical "Airdux" coils
> have
> a Q
> > > > > in the range of 300 or so.(Silver plating, or gold, would also be
> desirable
> > > > > to prevent lossy copper oxide build up). Anyway if you are
> interested
> I
> > > > > can send you the MathCAD file. I would be very happy if somebody could
> check
> > > > > my math. It think the point I was trying to make it that electrically
> short
> > > > > antennas have such a low real input impedance that building an
> efficient
> > > > > matching network is challenging to say the least. Even if such
> networks
> are
> > > > > feasible the huge voltages developed at the base could prove to be a
> > > > > problem.
> > > > >
> > > > > 73,
> > > > >
> > > > > Frank
> > >
> >

3260. [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 09:08:21 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <6h1gk09c88et0anvhpipo0jqdkragrqh2r@4ax.com>
Source record: 89481

Hi,

I have a Sony radio for SWL and I have seen that if I parallel a 300 ohm resistor to the antenna input the received signal drops considerably [1]. I think this means the receiver's input impedance is much greater than the normal 50/75 ohms. This makes me wonder two things:

- How can I measure the approximate value of the receivers input Z? I don't want to know the exact value, just to know if it is in the 500 / 1K / 10K range. I guess I can do this by paralleling increasingly valued resistors until there's not much effect on signal and assume that it about half that resistor's value.

- Having a 50 ohm feedline, would I benefit by using a 4:1 balun in reverse at the rcvr input? What kind of balun could I use for that? It would be great if it also provided some improvement of CMRR for noise picked by the feedline itself.

[1] I use a 100nF capacitor to isolate the 4~5 V DC level at the antenna input. I guess this DC may be there to feed some kind of active antenna.

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3261. Re: pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 10:44:27 UTC
From: Alex <no@spam.com>
Message-ID: <3v5gk0p7730n2c5cem47bkkb2lomubbf4j@4ax.com>
Source record: 89482

On Tue, 14 Sep 2004 11:31:29 -0700, "Andrey" <a8421@intergate.bc.ca>
wrote:

>PVC is not lossless, however...
>
>I used PVC drainage pipe (white, 3 mm thick maybe) to make radome for 900MHz
>antenna. Specifically, directional patch arrays. It tuned them down a little
>bit (2 mm maybe over half-wave length.) I did not measure significant
>decrease of gain. The cover did not touch the radiator. When it touches,
>loading get significantly worse.

tnx for your reply

But it seems to me that what you describe is not so much that the PVC
absorbs energy ("loss") but instead: that it unavoidably de-tunes the
antenna because of its high dielectric constant (about 5 to 9 I
understand). Especially when the PVC touches the radiators the
capacitance between radiator parts is markedly reduced because of this
phenomenon (anyway that is how I intuitively understand it...)

Alex

3262. dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 10:56:16 UTC
From: Thierry <"to answer direct see http">
Message-ID: <41481fd2@news.vo.lu>
Source record: 89483

Hi,

A question about dBW and power at receive.
Among scales used in power measurement, there is the signal strength or noise level estimation, also known as the "dB below W" (dBW or SDBW). Its relation is dBW = 10 Log P, where P is the power expressed in watt :
That means that 100 W is 20 dBW into 50 ohms.

But usually, in propagation program (VOACAP, etc), the power strength at receive expressed in dBW is far below such values. I read somewhere the next equivalences :
- (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.

With -93 dBW for a S9+10 signal at receive, that 'd mean that the power 'd be only P(W) = 10^ (dBW/10) = 0.7 watt ?
IMHO this power is much to low... What is wrong in this relations (or in my interpretation) ?

Thanks in advance

Thierry, ON4SKY
http://www.astrosurf.com/lombry

3263. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 12:24:16 UTC
From: Ralf Ballis - DL2MRB <rballis@gmx.de>
Message-ID: <ci9cgtbso04$1@news.t-online.com>
Source record: 89485

> But usually, in propagation program (VOACAP, etc), the power strength at
> receive expressed in dBW is far below such values. I read somewhere the
> next equivalences :
> - (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.

One S unit referencing 6 dB.
Some receivers has meter in dB over 1 micro V.

> With -93 dBW for a S9+10 signal at receive, that 'd mean that the power 'd
> be only P(W) = 10^ (dBW/10) = 0.7 watt ?

"W" mean level in Watt.

> IMHO this power is much to low... What is wrong in this relations (or in
> my interpretation) ?

P log * 10 = dbW

Reverse calculation:

dbW / 10 10^x = P

-93 / 10 10^x = 5,011e-10 = 0,0000000005011 Watt

Regards,

Ralf

--
Vy 73 es 55 de Ralf, DL2MRB
E-Mail: dl2mrb@darc.de
Board: www.hamradioboard.de

3264. Re: pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 12:30:11 UTC
From: fractenna@aol.com
Message-ID: <20040915083011.24216.00000670@mb-m10.aol.com>
Source record: 89484

>
>But it seems to me that what you describe is not so much that the PVC
>absorbs energy ("loss") but instead: that it unavoidably de-tunes the
>antenna because of its high dielectric constant

PVC is L-O-S-S-Y at 2.4 GHz. The amount varies according to manufacturer. CPVC has the least loss of a lossy lot.

OK?:-)

73,
Chip N1IR

3265. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 14:16:17 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <P5edncnxXeM509XcRVn-vQ@comcast.com>
Source record: 89486

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040914143340.05436.00000509@mb-m20.aol.com...
> >1500W into 50 Ohms yields 274V which you then divide by 27.4 to obtain
>>10V.
> As you already have 10V by divider action, what do you need to
>>multiply?
>
> Hi Richard, I want 10.00 VDC to indicate 1500 watts on my 0-10v meter
> with a
> linear scale. If I run the 10 volts thru the multiplier (squaring)
> circuit I
> get (10)**2/10=10 volts. So far so good, and you don't need a multiplier.
>>500W into 50 Ohms yields 158V which you then divide by 27.4 to obtain
>>5.77V. OK
>
> If I run 5.77v to my 10 volt full scale meter it will read
> 5.77/10*1500=865.5
> watts which is not 500 watts. However, if I run 5.77 thru my squaring
> circuit
> I get (5.77)**2/10=3.33 volts. Now my meter reads 3.33/10*1500=500 watts
> which
> is correct.
> If you plot the voltage across a 50 ohm resistor vs power V**2/50=power,
> you
> get a squared relationship. You can use volts to represent watts only if
> you
> scale the meter face correctly. I have seen wattmeters that did this. I
> believe the Drake model did. 0-100 watts took up the first half of the
> meter,
> and 100-1000 watts took up the other half.
> If you linearize the voltage by squaring and scaling you get a nice
> readout
> with 100 watts being on the left hand side of the meter, and 1500 on the
> right
> hand side, and linear in between.
> The AD633 probably uses log amps in realization of multiplication, I
> haven't
> looked at the internals. I have done multiplication with Log amps. I
> have to
> disagree on the AD538 being a better solution. One could use the 538, but
> the
> 633 is much simplier to use. Also I already had some AD633s
> 73 Gary N4AST

Gary,
Comment I have is in your resistive divider. To keep the power dissipations in the resistors low, you will have to use large resistor values, but at RF these can be off 50 % or more. So, you will want to build what looks like a 'scope probe, with each of the resistors shunted with a capacitor, where the two RC products are the same. For starters, try something like 2 - 5 PF for the smaller capacitor. Do not use ceramic capacitors, except for NPO. I would build the thing with at least 2 scales, say 0 - 150 and 0 - 1500 W.

Tam/WB2TT

3266. Re: 160 thru 20 meter homebrew vertical system

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 14:19:13 UTC
From: Frank <ve6cb@telus.net>
Message-ID: <BbY1d.16810$t61.13759@clgrps13>
Source record: 89487

Hi Art, no problem. The fact is the work I have done is entirely theoretical. Not to mention that it is based on equations published in 1943. It does need some lab verification to satisfy my own curiosity. Another ham wrote to me, pointing out that inductors with a large length/diameter ratios will probably have errors in the inductance value predicted. Anyway more work needs to be done, but appreciate your comments -- and the comments of others on this NG.

Regards,

Frank (VE6CB)

"Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message news:85ed38d.0409141950.775408f1@posting.google.com...
> Frank, had a quick read thru and obviously I stand corrected.
> This is a revised page to that which I read before bui anyway it shows
> that my memory is poor.
> Many apologies but I have also learned that my figures were way to low
> and that I must also review capacitor Q for a single gap as opposed to
> multi plates
> Regards
> Art"
>
>
>
>
>
> Frank" <ve6cb@telus.net> wrote in message news:<5UG1d.8576$t61.3826@clgrps13>...
> > This link http://www.w8ji.com/loading_inductors.htm also seems to confirm my
> > results with estimates for copper tube inductors.
> >
> > Frank
> >
> >
> > "Frank" <ve6cb@telus.net> wrote in message
> > news:_HD1d.25581$XP3.18559@edtnps84...
> > > Another ham in Calgary (VE6WZ, Don't know him) has done some work on high
> > Q
> > > coils (http://www.qsl.net/ve6wz/coil.), and provides a link (now dead) to
> > > W8JI. My calculations seem to show reasonable agreement with the program

> > he
> > > used from K6STI, which does not seem to be available. I would
certainly
> > > like to see some independent verification of the results. I am
tempted to
> > > build a coil and measure its Q.
> > >
> > > Frank
> > >
> > >
> > > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > > news:85ed38d.0409131926.5fd9711f@posting.google.com...
> > > > Tom W8JI talks about coils on his page and
> > > > if my memory is correct he has never measured a Q beyond 300
> > > > I use the 200/300 figure for my modelling and use as much as
800/1000
> > > > for capacitors. I am not competant enough to do any checking
> > > > of your particular program but I suspect your answers are in error
> > > > and await guru comments with interest
> > > > Art
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > "Frank" <ve6cb@telus.net> wrote in message
> > news:<w7n1d.147$t61.135@clgrps13>...
> > > > > "Art Unwin KB9MZ" <aunwin@insightbb.com> wrote in message
> > > > > news:85ed38d.0409131120.4a897a08@posting.google.com...
> > > > > > I doubt that the coil will have a Q of more than 300 if that !
> > > > > > Art
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > > "Frank" <frank599@telus.net> wrote in message
> > news:<JCe1d.97059$jZ5.12695@clgrps13>...
> > > > > > > "denton" <denton@oregontrail.net> wrote in message
> > > > > > > news:10k48almvc5ui2e@corp.supernews.com...
> > > > > > > > Hi all...
> > > > > > > > I am starting to work on something to use on 160 thru 20
meters.
> > > > > > > > I currently have an aluminum mast that is 32 ft long with a
> > small
> > cap
> > > > > > hat

> > > > > on
> > > > > > > > > top.
> > > > > > > > > the antenna will sit in the center of an area approx 50 z
50'
> > > > > (backyard).
> > > > > I
> > > > > > > > > plan to put down 40 plus radials, the majority which will be
> > situated
> > to
> > > > > > > > > radiate out from the base of the vertical.
> > > > > > > > > some will meander along the house foundation and property
line..
> > > > > > > > > I plan on also tying in the galvanized (not chain link)
fence
> > around
> > the
> > > > > > > > > back yard to the radial system, as well as the house
plumbing.
> > > > > > > > > 40 meters should be direct feed.
> > > > > > > > > I will homebrew a matching L network for use on 160 thru 60
> > meters.
> > > > > > > > > I will also try a 20 meter tuning stubb.
> > > > > > > > > Does anyone know what the size of the loading coil that MFJ
uses
> > in
> > > > > > their
> > > > > > 80
> > > > > > > > > & 40 meter vertical?
> > > > > > > > > I have read of just about everything I can find online of
this
> > sort of
> > > > > > > > > project and have played with Eznec demo a bit and think this
> > will
> > be a
> > > > > > > > > doable project.
> > > > > > > >
> > > > > > > > > Also the series inductor should have a very high Q for 160 m.
A Q
> > of
> > 1000
> > > > > > > > > will loose about 30% of your power.
> > > > > > > >
> > > > > > > > > Frank
> > > > > >
> > > > > > > > > Based on Terman's "Radio Engineers Handbook" dated 1943, pp 31 -
53.
> > I
> > have
> > > > > > > > > written a program In MathCAD Pro, which indicates a coil made from
> > 1/4"

> > > > > copper pipe, 12" long, and 3 inches diameter has an inductance of
39
> > uH
> > and
> > > > > a Q of 1132 at 1.8 MHz. (6" in diameter and 24" long shows a
nominal Q
> > of
> > > > > 1600). To be honest I have never built such a coil, and it would
> > probably
> > > > > be very difficult to measure. I agree that typical "Airdux" coils
> > have
> > a Q
> > > > > in the range of 300 or so.(Silver plating, or gold, would also be
> > desirable
> > > > > to prevent lossy copper oxide build up). Anyway if you are
> > interested
> > I
> > > > > can send you the MathCAD file. I would be very happy if somebody
could
> > check
> > > > > my math. It think the point I was trying to make it that
electrically
> > short
> > > > > antennas have such a low real input impedance that building an
> > efficient
> > > > > matching network is challenging to say the least. Even if such
> > networks
> > are
> > > > > feasible the huge voltages developed at the base could prove to be
a
> > > > > problem.
> > > > >
> > > > > 73,
> > > > >
> > > > > Frank
> > >
> > >

3267. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 14:46:39 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ci9kkf$d7h$1@sparta.btinternet.com>
Source record: 89488

"Roy Lewallen" wrote
> It's commonly known that a square wave consists of a sine wave of the
> square wave's fundamental frequency, plus all its odd harmonics.
> Specifically, all components are in phase, and their amplitudes are the
> inverse of the harmonic number. That is, if the amplitude of the
> fundamenatal sine wave is 1, the amplitude of the third harmonic is 1/3,
> the amplitude of the fifth harmonic is 1/5, and so forth.
>
> So we should be able to create a square wave by adding all those sine
> waves -- right?
>
> It turns out that if we add the first few sine wave components, we have
> a fairly square looking wave -- but it has an overshoot at the leading
> and trailing edges. As we add more and more harmonics, the result gets
> more square, and the overshoot gets narrower and narrower -- but it
> remains, and with the same amplitude. Although the width approaches zero
> as the number of sine waves you've added gets infinite, there's always
> an overshoot for any finite number of sine waves.
>
> This is one manifestation of the Gibbs' Phenomenon, which also applies
> to other situtations. There's a really nifty demo at
> http://klebanov.homeip.net/~pavel/fb//java/la_applets/Gibbs/.
>
==========

The trouble with Fourier when attempting to use him with waveshapes on transmission lines is that there is no fundamental frequency or cyclic repetitions. His infinite series are solely functions of frequency.

Whereas volts and current on lines are functions of time (the recprocal of frequency) and distance. That's where Heaviside's Operational Calculus comes in. In special cases (if you can find your particular problem in the long list of transforms and their inverses) his methods reduce to Laplace Transforms. But in general, as with Fourier, his answers appear as infinite series. Of course, infinite series pose no problems with present-day computers.

The very first problems were encountered by Kelvin with the speed and distortion and economics of telegraph-code signals on long cables. 0 and 1 signals change shape and merge into each other at high data rates. Fourier could not provide answers. Exactly the same problems still occur on high data-rate digital circuits and light-fibers, further aggravated by echos and reflections. But Heaviside's revolutionary mathematics, which so upset the old-wives of professors of his day and abolished the need for SWR's, did the trick.

Reg, G4FGQ

3268. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 15:20:29 UTC
From: Thierry <"to answer direct see http">
Message-ID: <41485dbf$1@news.vo.lu>
Source record: 89489

"Ralf Ballis - DL2MRB" <rballis@gmx.de> wrote in message
news:ci9cgtbso04$1@news.t-online.com...
> > But usually, in propagation program (VOACAP, etc), the power strength at
> > receive expressed in dBW is far below such values. I read somewhere the
> > next equivalences :
> > - (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.
>
> One S unit referencing 6 dB.
> Some receivers has meter in dB over 1 micro V.
>
> > With -93 dBW for a S9+10 signal at receive, that 'd mean that the power
'd
> > be only P(W) = 10^ (dBW/10) = 0.7 watt ?
>
> "W" mean level in Watt.
>
> > IMHO this power is much to low... What is wrong in this relations (or
in
> > my interpretation) ?
>
> P log * 10 = dbW

Does not exist ! But well dBW = 10 Log P, this is not the same excepting
reading from right to left, Hi!
Your explanation is not one. refer my link for a correct explanations.
Anyway, how do you calculate the dBW on 20m with such a formula. Someone
calculated dBW on 10m, so we must be able to do the same at 20m...

But how ?

Thierry
>
> Reverse calculation:
>
> dbW / 10 10^x = P
>
> -93 / 10 10^x = 5,011e-10 = 0,0000000005011 Watt
>
> Regards,
>
> Ralf
>
> --
> Vy 73 es 55 de Ralf, DL2MRB
> E-Mail: dl2mrb@darc.de

> Board: www.hamradioboard.de

3269. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 15:22:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <krlgk0p1kqmcqh01qu3711qhr6e94d07c1@4ax.com>
Source record: 89490

On Wed, 15 Sep 2004 14:46:39 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>Of course, infinite series pose no problems with present-day
>computers.

Hi Reggie,

In fact, computers do NOT use infinite series (at least not in commercial products) and only symbolic math packages are capable of emulating Fourier. The FFT, the Fast Fourier Transform developed by Blackman and Tukey ("The Measurement of Power Spectra," Bell Labs, 1958), implements the concept in finite series that are then "windowed" to create a period from any transient data. The consequence of this is that the spectrum blurs, or if you use different windowing functions to clear up the blur, the amplitude assumes a non-negligible portion of error.

"We face a three way compromise among effort, resolution, and stability (precision) of estimate.
....
"If, for example, a resolution of 0.1 cps is to be obtained from 6 pieces of record and is to furnish stability of ï¿½2 db for (on average) 9/10 of the individual estimates, then the necessary duration will be 150 seconds." (ppg 56-57)

73's
Richard Clark, KB7QHC

3270. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 15:40:44 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <I43A7w.EFI@bath.ac.uk>
Source record: 89493

Allodoxaphobia wrote:

>>Incidentally, while you can extract only half the power from a wave with
>>a perfectly efficient antenna, it is possible to extract *all* the power
>>from a wave. An anechoic chamber extracts essentially all the power from
>>waves generated within it.
>
>
> As well, the universe, in all it's vastness, eventually "...extracts
> essentially all the power from waves generated..." by _any_ source. HI!HI!
>

No it doesn't. Free space can't extract any energy whatsoever from EM
waves travelling through it. Consider :-
The cosmic microwave background hasn't had it's power extracted by
the universe in all the time since the big bang. Conservation of
energy applies everywhere.

Just my opinion ;-) but it's allodoxOphobia.

best

Andy

3271. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 15:43:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dbogk0tahujqdemlsifd3iehootcnfuh48@4ax.com>
Source record: 89491

On Wed, 15 Sep 2004 11:08:21 +0200, Toni <post_to_usenet@hotmail.com>
wrote:

>I have a Sony radio for SWL and I have seen that if I parallel a
>300 ohm resistor to the antenna input the received signal drops
>considerably

Hi Toni,

This is something you could test yourself:
>- Having a 50 ohm feedline, would I benefit by using a 4:1 balun
>in reverse at the rcvr input?
with a before/after 300 ohm resistor application. Sure it isn't a 330
Ohm resistor? 300 is not a standard value. Also, is there any chance
this resistor is wire wound? Makes an important difference!

Alternatively, the same phenomenon should occur if you put the
resistor in series. Be careful to maintain ground in all tests.

Finally, what are you using as an input reference? The signal from
this same 50 Ohm feedline?

73's
Richard Clark, KB7QHC

3272. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 15:47:43 UTC
From: Helmut Wabnig <**********>
Message-ID: <8togk0pgj4fo9ad11fm1umjh35606cmitn@4ax.com>
Source record: 89492

On Wed, 15 Sep 2004 11:08:21 +0200, Toni <post_to_usenet@hotmail.com>
wrote:

>Hi,
>
>I have a Sony radio for SWL and I have seen that if I parallel a
>300 ohm resistor to the antenna input the received signal drops
>considerably [1]. I think this means the receiver's input
>impedance is much greater than the normal 50/75 ohms. This makes
>me wonder two things:
>
>- How can I measure the approximate value of the receivers input
>Z? I don't want to know the exact value, just to know if it is in
>the 500 / 1K / 10K range. I guess I can do this by paralleling
>increasingly valued resistors until there's not much effect on
>signal and assume that it about half that resistor's value.
>
>- Having a 50 ohm feedline, would I benefit by using a 4:1 balun
>in reverse at the rcvr input? What kind of balun could I use for
>that? It would be great if it also provided some improvement of
>CMRR for noise picked by the feedline itself.
>
>[1] I use a 100nF capacitor to isolate the 4~5 V DC level at the
>antenna input. I guess this DC may be there to feed some kind of
>active antenna.

Buy a cheap passive antenna tuner, e.g. the YAESU FRT-7700
or the one from MFJ Enterprises.

Forget that idea with the resistors.

w.

3273. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 15:56:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ssogk09bb4agsvpdrbf7u40r5v8pljivkp@4ax.com>
Source record: 89494

On Wed, 15 Sep 2004 12:56:16 +0200, "Thierry" <to answer direct see
http://www.astrosurf.com/lombry/post.htm> wrote:

>But usually, in propagation program (VOACAP, etc), the power strength at
>receive expressed in dBW is far below such values. I read somewhere the next
>equivalences :
>- (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.
>
>With -93 dBW for a S9+10 signal at receive, that 'd mean that the power 'd
>be only P(W) = 10^ (dBW/10) = 0.7 watt ?
>IMHO this power is much to low... What is wrong in this relations (or in my
>interpretation) ?

Hi Thierry,

S-9 is the reference point for a 50ï¿½V signal into the receiver's 50
Ohm input. This is -73dBM (level below one milliwatt). Translating
to levels below one Watt is performed by subtracting another 30 (the
milli) dB - hence -103dBW.

Power is a curious thing. Transmitter efficiency as measured by the
target population that receives the signal is pitiful. If every
person on the planet had a radio that picked up your 100W signal with
S-9 level, you would be pumping 99.9% of your 100W into the void
without anyone missing it anywhere. Efficiency < 0.1%

Given that you are NOT heard by everyone (they don't care to listen),
then transmitter efficiency plunges at least 7 or 8 more orders of
magnitude. Efficiency < 0.00000001%

73's
Richard Clark, KB7QHC

3274. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 16:01:16 UTC
From: Ralf Ballis - DL2MRB <rballis@gmx.de>
Message-ID: <ci9p7q$u2c$02$1@news.t-online.com>
Source record: 89495

"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote:

> Does not exist ! But well dBW = 10 Log P, this is not the same excepting
> reading from right to left, Hi!

OK, hi...

> Your explanation is not one. refer my link for a correct explanations.

Taka a look at:

http://hyperphysics.phy-astr.gsu.edu/hbase/sound/db.html

> Anyway, how do you calculate the dBW on 20m with such a formula. Someone
> calculated dBW on 10m, so we must be able to do the same at 20m...

This calculations aren't depend on frequency or wavelength.

Regards,

Ralf

--
Vy 73 es 55 de Ralf, DL2MRB
E-Mail: dl2mrb@darc.de
Board: www.hamradioboard.de

3275. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 16:07:30 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <41486a5b$1_4@corp.newsgroups.com>
Source record: 89496

Andy Cowley wrote:
> Allodoxaphobia wrote:
>> As well, the universe, in all it's vastness, eventually "...extracts
>> essentially all the power from waves generated..." by _any_ source.
>
> No it doesn't. Free space can't extract any energy whatsoever from EM
> waves travelling through it. Consider :-
> The cosmic microwave background hasn't had it's power extracted by
> the universe in all the time since the big bang. Conservation of
> energy applies everywhere.

True so far, but just you wait till the *BIG CRUNCH*. You don't
really think that our present Big Bang was the first one ever,
do you? :-)
--
73, Cecil, W5DXP

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
------== Over 100,000 Newsgroups - 19 Different Servers! =-----

3276. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 16:07:32 UTC
From: Andy Cowley <andy.cowley@uwe.ac.uk>
Message-ID: <I43BGK.FCo@bath.ac.uk>
Source record: 89497

Thierry wrote:

> Hi,
>
> A question about dBW and power at receive.
> Among scales used in power measurement, there is the signal strength or
> noise level estimation, also known as the "dB below W" (dBW or SDBW). Its
> relation is dBW = 10 Log P, where P is the power expressed in watt :
> That means that 100 W is 20 dBW into 50 ohms.
>
> But usually, in propagation program (VOACAP, etc), the power strength at
> receive expressed in dBW is far below such values. I read somewhere the next
> equivalences :
> - (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.
>
> With -93 dBW for a S9+10 signal at receive, that 'd mean that the power 'd
> be only P(W) = 10^ (dBW/10) = 0.7 watt ?
> IMHO this power is much to low... What is wrong in this relations (or in my
> interpretation) ?
>

Your calculation of 0.7 W is wrong by many
orders of magnitude.

dBW = 10 Log(P)

-93 = 10 Log(P)
-9.3 = Log(P)
Alog(-9.3) = P
ALog (-9.3) = 5.012 * 10^-10 W
(5.011872336272722850015541868849 5e-10 by win2k calculator)
So the problem is much, much worse than you thought.

Try this scenario:-

You are in Belgium, I'm in the west of the U.K. about
400 km away. You transmit using 100W and I get an S9+10
signal. All seems reasonable? Say this is on 80 metres
so both our antennas are omnidirectional. My antenna
will only receive power proportional to the solid
(stereo) angle it subtends at your QTH. So the power
of 5e-10 W seems about right to me. Just think how
many other 80 metre dipoles would fit in around that
400 km circle. Then all the ones that would fit onto
a 400km radius hemisphere. They would all get a tiny
share of your 100 W!!!

Receivers are very, very sensitive or radio wouldn't
work at all.

A signal of 1 microvolt into 50 ohms is the same as
a power of 2 x 10^-14 W !!! (P = V^2/R)

Hope this helps.

vy 73

Andy, M1EBV

3277. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 17:15:41 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <ci9tgn$p1$1@newshost.mot.com>
Source record: 89502

"Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
wrote in message news:41481fd2@news.vo.lu...
> Hi,
>
> A question about dBW and power at receive.
> Among scales used in power measurement, there is the signal strength or
> noise level estimation, also known as the "dB below W" (dBW or SDBW). Its
> relation is dBW = 10 Log P, where P is the power expressed in watt :
> That means that 100 W is 20 dBW into 50 ohms.
>
> But usually, in propagation program (VOACAP, etc), the power strength at
> receive expressed in dBW is far below such values. I read somewhere the
next
> equivalences :
> - (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.
>
> With -93 dBW for a S9+10 signal at receive, that 'd mean that the power 'd
> be only P(W) = 10^ (dBW/10) = 0.7 watt ?
> IMHO this power is much to low... What is wrong in this relations (or in
my
> interpretation) ?
> Thanks in advance
> Thierry, ON4SKY
> http://www.astrosurf.com/lombry
>
>

As others pointed out, your calculation is wrong and that .7 W is way too
large for received power. We receive powers in the -123 dBm (-153 dBW)
range easily and that's ok

However, it is not clear from your post just what you want to do/ask/learn.
What is your number too low for? What are you wanting?
--
Steve N, K,9;d, c. i My email has no u's.

3278. Fan dipole in attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 17:31:18 UTC
From: Jack Twilley <jmt+usenet@twilley.org>
Message-ID: <86vfefv3q1.fsf@duchess.twilley.org>
Source record: 89498

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

My new location has a short narrow attic with a traditional shape --
gentle pitch from a raised ridge which crosses the house along the
long axis, like a triangular prism. I have a fan dipole from my last
location that I'd like to try to reuse. Will I be able to get away
with putting the longest legs of the dipole along the center line,
parallel to the ground, and then putting the shorter legs (what was
once an inverted vee) angling towards the corners of the roof?

center line
V
+-----------------+
| 40mL |
| 20mL * |
| * | 10mL |
| \ | * |
| \ | / |
| \|/ |
| * |
| /|\ |
| / | \ |
| * | \ |
| 10mR | * |
| * 20mR |
| 40mR |
+-----------------+

I know "everything works", but this is likely to be the only antenna I
can get up in time for the California QSO Party in a couple of weeks,
so I'm hoping that it'll be "good enough".

Thanks in advance for thoughts and suggestions.

Jack.
- --
Jack Twilley
jmt at twilley dot org
http colon slash slash www dot twilley dot org slash tilde jmt slash
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.2.5 (FreeBSD)

iD8DBQFBSHxrGPFSfAB/ezgRAlF2AKDlZVUIHttJjQdTOac19Zr6OuVVNwCgsi+k
AlPCXS3+og+uEvELeTngSHw=
=qYq4
```

```
-----END PGP SIGNATURE-----
```

3279. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 17:32:06 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <q0%1d.937$gG4.712@newsread1.news.pas.earthlink.net>
Source record: 89499

"And there's no reason at all to
resurect the Boston Tea Party."
A waste of good tea, no doubt.
73
H.
"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:ci7sf4onr1@hercules.btinternet.com...
>
> "H. Adam Stevens, NQ5H" said -
> > Not to diminish Heaviside's contribution, it was Gibb's work that led to
> the
> > present mathematical expression of Maxwell's equations.
> > The Heaviside equation survives to this day as the description of the
> > electromagnetic field of a moving charged particle.
> > But since Gibbs was American I'm sure you Brits will argue.
>
> ======================================
>
> I'll allow a wine-assisted imagination to wander around my own history.
>
> I came across Gibbs around 1948 by accident while searching for more
> information on transmission lines in general. Google had not been
invented.
> He appears to have made his name known (no doubt also in other matters)
> because of his "Gibb's Phenomenon", an overshoot of some kind in an
> extension of Fourier's Waveform Analysis. At the time I had no interest
in
> 'overshoots' and forgot all about it. My ignorance about Gibb's other
work
> has continued ever since. I appologise for no mention of his name in
> connection with tidying up Maxwell's work. And there's no reason at all to
> resurect the Boston Tea Party.
>
> Heaviside died in solitude in 1925. I was born during a freezing 6-feet
> deep snow-storm 9 months later. I sometimes like to think there is a
> spiritual connection.
>
> Mother was a little hard-working woman who took in laundry and
> clothes-ironing from the slightly better-off classes. Father was a
> 30-shillings a week iron-bolt header but the national General Strike was
> imminent. In his spare time he taught himself to drill holes in ebonite
> panels using a red-hot poker the smell of which began my technical
> education. But he could solve quadratic equations in his head without the
> use of pencil and paper or any knowledge of algebraic symbols. I never

> understood how he did it. Although he lived to the age of 90 he could
never
> explain it himself.
>
> <snip>
>
> Around 1951, as a sideline with other duties, while working in the
> Engineer-in-Chief's Office of the British Post Office, I first became
> involved with the location of faults on transmission lines. Then, for a
> period, I specialised in faults on the then new deep-sea coaxial cables
with
> submerged valve-type repeaters (amplifiers). Transistors were not good or
> reliable enough.
>
> I worked alone but with the facilities of a shared workshop and staff. My
> boss was an ex-cable ship Cable Testing Officer, a Ph.D, I think next to
the
> captain in rank, who always said the only doctor in his family was his
> brother, a doctor of medicine. His name was Bray and he had the knickname,
> when not in his company, of "The Vicar".
>
> <snip>
>
> I became involved with reflection coefficients, etc., in the frequency
range
> 0.1Hz up to HF using rectangular-waves and sinewaves. The Dollis Hill,
> Research Depapartment laboratories (the PO Bell-Labs) made me a 0.1 to 100
> Hz, balanced-and-screened output transformer, to be used in a power
> amplifier, a test signal generator. The amount of 10-thou, mu-metal used
in
> it necessitated a special order being placed on the lamination
manufacturer.
>
> I had to make my own precision 0-to-11.111 microfarad, 5-dial, variable
> capacitor entirely out of specially made polyethylene-dielectric
metal-cased
> capacitors. Absorption with all other dielectrics was far too high at
0.1Hz
> to make accurate impedance bridge measurements. Mica was awful!
>
> Incidentally, apart from research work, the only occasion this capacitor
was
> used for a practical purpose was to locate a fault on a land cable when I
> was in Sweden. The embarrassed Swedish engineers were not aware the fault
> existed. Needless to say I promised aboard the ship on my departure not to
> include the incident in my report. And I didn't. The Vicar, with his
cruel
> sense of humour, was not altogether happy but for technical political
> purposes I had him by the balls. He was really a kind fellow and before
> retirement he ended up as Head of the PO Engineering Training College.

>
> Some years later I had the idea of donating the transformer and capacitor
to
> the Science Museum in London. But some other equally sentimental
collector
> had already stolen them. I sometimes wonder (2004) where they are now.
>
> <snip>
>
> But this is a long way from the much neglected Heaviside.
>
> During the course of my fault location research I ran into a mental
> blockage. Ultimately, I had to translate the appearance of the reflected
> waves, as appeared on a 10 second persistance cathode ray tube, a function
> of time, into miles from one end of the cable. That is all the ship's
> captain needs to know before he can leave port and set a course. He can
then
> retire to his lonely cabin with a bottle of duty-free scotch if he should
so
> wish.
>
> Eventually I discovered Heaviside's Operational Calculus. Lo and behold,
> winding the handle on a German mechanical calculating machine, there
> appeared on a sheet of graph paper the same shaped curves as on the
> long-persistence CRT. The fault locating equipment was eventually
installed
> at oceanic terminal stations. I had the oportunity to use it on the first
> breakdown to occur on the relatively short Middlesborough-Gothenburg cable
> which, as usual, was due to an unknown fishing trawler in the north sea.
>
> All the learned arguments on this newsgroup about SWR, the various
> reflections and virtual this that and the other, occur because time is
> ignored. It is admitted time does complicate matters. But Heaviside sorted
> transient matters out, versus time, many moons ago.
> ---
> Reg.
>
>

3280. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 17:39:28 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qrdh0F12nj74U5@uni-berlin.de>
Source record: 89500

I found this on the net, which may help you.....

Alimentary Fourier Anal-ysis

(C) Copyright 1997 Gareth Alun Evans G4SDW

The Fourier Transform is rather like the Human Alimentary canal....

The Alimentary Canal takes food, and then transforms it into
something that is a function of the rear end, and hence may
be referred to as, "The Food-Rear Transform".

The Fourier Transform causes integration over a one second
period, and results in an infinite series of sines.
The Food-Rear Transform causes disintegration over a 12-hour
period, and results in an infinite series of signs...."Gents",
"Ladies", "Rest Room", etc. etc.

The Fourier Transform (Tukey's reasoning?) takes Time and
transforms it to a frequency spectrum.
The Food-Rear Transform takes Parsley, Sage and Thyme (Turkey's
seasoning?) and transforms it to a frequently active rectum.

"Laplace", literally, "The Place", is how you deal with
the transform.
"Walsh" is something you do to your hands afterwards.
"JPeg" is what you hang your jacket on to. It is a form of
compression such that you take up less space and spend less time
there (although the output may be more granular).

The Fast Fourier Transform must be done through an appropriate
window, otherwise an effect known as the "Picket Fence" problem,
also known as "Spectral Leakage", can occur.
Diarrhoea is known as the FAST Food-Rear Transform, and if done
through the wrong window can result in a problem (also known
as Rectal Leakage) all over the Picket Fence.

The Picket Fence problem is also known as, "Scalloping",
something which is normally done to pie crusts. In the old
days, pies used to be made with "Four And Twenty Blackbirds";
but nowadays, members of the Jay family are used. When you go to
someone's house for tea, you politely eat everything that is
put in front of you, but your reaction might be,
"Eat the Jay (Oh my God!) Tea???".
Similarly, the Fourier Transform is a great consumer
of e^(jwT)... "E to the j, omega, t".

The Fast Fourier Transform is famous for its Butterflies.
The Fast Food-Rear Transform is famous for its
Butterflies-in-the-stomach.

Dirichlet's are the Fourier Transform's conditions, without which
the result is divergent.
Diarrhoea Shits are the Food-Rear's conditions, with which the
result is VERY divergent.

Having experienced the Fast Fourier Transform, you are then faced
with the Inverse, which can be very daunting. It is a paper
exercise but it can be quite messy.
Having experienced the Fast Food-Rear Transform, you are then
faced with the "In Verde", literally "In The Grass", which can be
very daunting indeed. (The paper exercise can be quite messy.)

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:krlgk0p1kqmcqh01qu3711qhr6e94d07c1@4ax.com...
> In fact, computers do NOT use infinite series (at least not in
> commercial products) and only symbolic math packages are capable of
> emulating Fourier. The FFT, the Fast Fourier Transform developed by
> Blackman and Tukey ("The Measurement of Power Spectra," Bell Labs,
> 1958), implements the concept in finite series that are then
> "windowed" to create a period from any transient data. The
> consequence of this is that the spectrum blurs, or if you use
> different windowing functions to clear up the blur, the amplitude
> assumes a non-negligible portion of error.
>
> "We face a three way compromise among effort, resolution, and
> stability (precision) of estimate.
> ....
> "If, for example, a resolution of 0.1 cps is to be obtained from
> 6 pieces of record and is to furnish stability of ±2 db for
> (on average) 9/10 of the individual estimates, then the necessary
> duration will be 150 seconds." (ppg 56-57)

3281. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 17:42:04 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qrdh1F12nj74U6@uni-berlin.de>
Source record: 89501

ISO is international and covers French, German, Spanish, Swedish,
Norwegian, Russian, Chinese, Japanese, Turkish, Yiddish, etc, etc.

The English standard, which is the subject of this thread, is 11/9/2001

"Bill Turner" <noway@nohow.com> wrote in message
news:fb4fk09bbr9ii112uloq26tl7b43lhea1u@4ax.com...
> On Mon, 13 Sep 2004 18:31:22 +0100, "Airy R. Bean" <me@privacy.net>
> wrote:
> >In the English-speaking world, it should read, "11/9/2001"
> The ISO standard is 20040911. Largest time unit first (year) then next
> largest (month) then smallest (day). One advantage to this format is
> computers can sort dates as a simple number without any special
> programming.
> This can be continued with hours, minutes and seconds if desired.
> If the world were a rational place, this would become universal
> overnight.

3282. Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 18:47:40 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <41488E4C.2060604@ix.netcom.com>
Source record: 89503

See article at
http://skyandtelescope.com/news/article_1334_1.asp

It is to observe the sky from 10 to 250MHz, what they
call "low frequency". 15 thousand antennas in an
array 350 kilometers across.

3283. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 18:59:23 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <4148910A.4080007@ix.netcom.com>
Source record: 89504

Toni wrote:
> Hi,
>
> I have a Sony radio for SWL and I have seen that if I parallel a
> 300 ohm resistor to the antenna input the received signal drops
> considerably [1]. I think this means the receiver's input
> impedance is much greater than the normal 50/75 ohms. This makes
> me wonder two things:
>

The input impedance will vary depending on the receive frequency.
It's something that isn't much worried about in radio design for
SW. As the radio's AVC circuits will make up for gain losses
due to mismatches. Also realize that the receiver's front end
noise is much less than the amount of noise produced by the
natural and man made environment. That would limit how much DX
you can do. A perfect match of antenna to front end would just
deliver more noise along with signal, and would be indistinguishable
from a mismatch with the AVC making up the missing gain. I'm
talking about around 10dB mismatches here.

3284. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 20:39:06 UTC
From: fractenna@aol.com
Message-ID: <20040915163906.13201.00000612@mb-m11.aol.com>
Source record: 89505

>See article at
>http://skyandtelescope.com/news/article_1334_1.asp

My educated opinions on this matter are as follows--thisreport is very sugar coated: The Dutch decision broke up the original consortium and, in my opinion, severely degraded the success as originally outlined. The astronomical community is not happy: this is the first time that an international astronomy community has worked against itself.

This is NOT 'LOFAR' as defined, but a highly compromised derivative version. Holland is a very poor site location for these frequencies, because of the high population areas and extant HF/VHF use. Also, the cross polarization inverted V element is a poor antenna for the relevant passband.

A good link on the original plan is:

http://www.lofar.org

73,
Chip N1IR

3285. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 21:06:05 UTC
From: Minnie Bannister <GoonButNotForgotten@NottheBBC.org>
Message-ID: <10khblsjqgksk93@corp.supernews.com>
Source record: 89506

The logical way would be 2001/09/11, but the only place I've actually
been where they do dates that way is Taiwan.

Alan NV8A

On 09/13/04 01:31 pm Airy R. Bean put fingers to keyboard and launched
the following message into cyberspace:

> Can't something be done about the erroneous date format?
>
> In the English-speaking world, it should read, "11/9/2001"

3286. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 21:17:45 UTC
From: jgboyles@aol.com
Message-ID: <20040915171745.09431.00000812@mb-m05.aol.com>
Source record: 89507

>E = Root (P*R)
>
>Scaled V is V / 273 but you'll have to go further to stay in the dynamic
>range of the multiplier. V^2 should be around 10V or whatever the mult can
>output.

Thanks for checking my calcs. Steve. I had to do what your spreadsheet did by hand. I should note that since I have to convert the voltage to the multiplier to DC, at 1500 watts we are working with 273*SQRT 2 or 386 volts. I size the divider so that 386 this gives 10.0 volts to the multiplier. With a dual polarity 15VDC supply, the multiplier has enough dynamic range.
73 Gary N4AST

3287. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 22:02:53 UTC
From: jgboyles@aol.com
Message-ID: <20040915180253.09431.00000815@mb-m05.aol.com>
Source record: 89508

>Comment I have is in your resistive divider. To keep the power dissipations
>in the resistors low, you will have to use large resistor values, but at RF
>these can be off 50 % or more.

Well, I hadn't thought of that, so I'm glad I asked the question. I had planned on using a 200k 1/2 watt carbon and about 5k 1/2 watt for the divider, keep the leads short, and locate it a close as possible to what I think is 50 ohms in my system.
Do you think it would be worth the time and effort to do an rf frequency sweep of the divider to see how accurate it is? I realize this method is not going to be dead accurate, but I was hoping for better than 50%.
73 Gary N4AST

3288. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 22:58:21 UTC
From: jgboyles@aol.com
Message-ID: <20040915185821.09431.00000817@mb-m05.aol.com>
Source record: 89509

Hi Gary,

I like the topic of discussion. I've been working with the AD633's for several years now. I'm wondering why you vered away from the V*I idea. That would make your calculation good for any load. Instantaneous V times instantaneous I will give the answer whatever the relative phase happens to be. Maybe I'm missing something?

Hi Jim, this didn't show up on my ng reader for some reason, hope you don't mind me replying on the ng.
The reason I didn't the V*I route, which as you say, is the obvious way to go: I did not feel I could get accurate V and I samples over a wide range of RF frequencies, with my limited knowledge and resources. I thought a simple resistive voltage divider would make it real simple, and somewhat frequency independent. I am now finding through the responses I have gotten, that resistors will be frequency dependent as well. Darn.
I recently tried to use 633s in an application at 60hz to detect when a very large generator went from producing power (generator) to absorbing power (motor). I found that the potential and current transformers I was using introduced an unacceptable phase shift from primary to secondary. I tried several different types but finally took another approach. This is probably another reason that steered me away from the V*I solution.
If you have a simple way to get accurate V and I samples for say 3-30MHZ I am all ears, and forever in your debt.
73 Gary N4AST

3289. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-15 23:51:01 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <U-idnXggdpjKSNXcRVn-og@comcast.com>
Source record: 89510

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040915180253.09431.00000815@mb-m05.aol.com...
> >Comment I have is in your resistive divider. To keep the power
> >dissipations
>>in the resistors low, you will have to use large resistor values, but at
>>RF
>>these can be off 50 % or more.
>
> Well, I hadn't thought of that, so I'm glad I asked the question. I had
> planned on using a 200k 1/2 watt carbon and about 5k 1/2 watt for the
> divider,
> keep the leads short, and locate it a close as possible to what I think is
> 50
> ohms in my system.
> Do you think it would be worth the time and effort to do an rf frequency
> sweep of the divider to see how accurate it is? I realize this method is
> not
> going to be dead accurate, but I was hoping for better than 50%.
> 73 Gary N4AST

Hi Gary,

I just measured some random 1/2W carbon resistors with an MFJ at 30 MHz.
This is not a precision instrument, but shows a trend.

Nominal Measured
5.6 K 0 - j586
220K 0 -j 600
1.8K 99 - j539 (convert this to parallel form)

As a sanity check

11 Ohms 12 + j4 (some lead inductance here)

What this is tending to show is that the resistors are showing a shunt
capacitance whose reactance is about 600 Ohms at 30 MHz. That is about 9 PF,
which seems high. I was expecting more like 1 PF. I want to redo this at a
higher frequency, might be out of range for the MFJ.

I notice my Kenwood power meter uses a capacitive divider for the voltage
sample. A friend of mine built a meter along the lines of what you want to
do. I will ask him what he did.

Tam

3290. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 00:21:04 UTC
From: jgboyles@aol.com
Message-ID: <20040915202104.09431.00000821@mb-m05.aol.com>
Source record: 89511

>Hi Gary,
>
>I just measured some random 1/2W carbon resistors with an MFJ at 30 MHz.
>This is not a precision instrument, but shows a trend.

Hi Tam, I can't thank you enough for your efforts. I will be waiting for your results. Unfortunately, I am waiting for Hurricance Ivan also, so I won't be in the shop for a few days.
73 Gary N4AST

3291. Phasing for Delta Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 01:15:23 UTC
From: n3ow@rcn.com
Message-ID: <94qhk0di15g824shck5sf9384ued96c5s7@4ax.com>
Source record: 89512

I am buliding a 40 meter delta loop.
the question I have is the phasing line should be 75ohms what I would
like to know will RG59 work for high power or should I use RG11.
currently I only run 100 watts but am looking for a AMP.
thank you
Jay N3OW

3292. Good Antenna for Attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 02:50:59 UTC
From: Matt <nospam.hciss@yahoo.com>
Message-ID: <10khvsh7b9fad94@corp.supernews.com>
Source record: 89513

Looking for a broadband scanner antenna for my attic. Would like 29-900Mhz
receive and TX on 150 & 450Mhz ranges. TX is not that important really.
Any suggestions?

Matt

3293. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 04:16:42 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10ki4tdsop53683@corp.supernews.com>
Source record: 89514

It's much more likely that the shunt capacitance is in the MFJ.

Calculate the parallel impedance of 11 + j0 (the presumed resistor) and
0 - j600 (the shunt C) and you'll see that you wouldn't be able to see
the shunt C when making the 11 ohm "sanity check".

Even at HF, measurements aren't nearly as simple as they sometimes seem
they should be.

Roy Lewallen, W7EL

Tam/WB2TT wrote:
>
> Hi Gary,
>
> I just measured some random 1/2W carbon resistors with an MFJ at 30 MHz.
> This is not a precision instrument, but shows a trend.
>
> Nominal Measured
> 5.6 K 0 - j586
> 220K 0 -j 600
> 1.8K 99 - j539 (convert this to parallel form)
>
> As a sanity check
>
> 11 Ohms 12 + j4 (some lead inductance here)
>
> What this is tending to show is that the resistors are showing a shunt
> capacitance whose reactance is about 600 Ohms at 30 MHz. That is about 9 PF,
> which seems high. I was expecting more like 1 PF. I want to redo this at a
> higher frequency, might be out of range for the MFJ.
>
> I notice my Kenwood power meter uses a capacitive divider for the voltage
> sample. A friend of mine built a meter along the lines of what you want to
> do. I will ask him what he did.
>
> Tam
>
>

3294. Re: Good Antenna for Attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 07:46:13 UTC
From: remove_ok1sip@atlas.cz
Message-ID: <5f5159fa.0409152346.57b758f1@posting.google.com>
Source record: 89515

Hi Matt,
the most broadband VHF / UHF receiving antenna, quite easy to build,
is a discone antenna. Search the web for "discone", you will find what
you need.

BR from Ivan

"Matt" <nospam.hciss@yahoo.com> wrote in message
news:<10khvsh7b9fad94@corp.supernews.com>...
> Looking for a broadband scanner antenna for my attic. Would like 29-900Mhz
> receive and TX on 150 & 450Mhz ranges. TX is not that important really.
> Any suggestions?
>
> Matt

3295. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 08:13:07 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <16iik0d3cs4gfqoervcf053i6bnn88nsej@4ax.com>
Source record: 89516

Hi Richard,

En Richard Clark va escriure en Wed, 15 Sep 2004 15:43:55 GMT:

>On Wed, 15 Sep 2004 11:08:21 +0200, Toni <post_to_usenet@hotmail.com>
>wrote:
>
>>I have a Sony radio for SWL and I have seen that if I parallel a
>>300 ohm resistor to the antenna input the received signal drops
>>considerably
>
>This is something you could test yourself:
>>- Having a 50 ohm feedline, would I benefit by using a 4:1 balun
>>in reverse at the rcvr input?
>with a before/after 300 ohm resistor application. Sure it isn't a 330
>Ohm resistor? 300 is not a standard value. Also, is there any chance
>this resistor is wire wound? Makes an important difference!

It probably is 330 ohm, it wrote 300 ohms just to show in what
order of value it was. It is not a wire wound, probably a bad
quality carbon resistor, but even in the firs case I think it
would only affect if used in series, not if used in paralel
(where the extra inductance would simply put a higher value Z in
parallel to the source)

>Alternatively, the same phenomenon should occur if you put the
>resistor in series. Be careful to maintain ground in all tests.

Yes, the series circuit would also probably work foro estimating
the input Z, but with the parallel it is easier to solder one leg
of the resistor to ground and touch/don't touch the signal wire
to compare both situations.

>Finally, what are you using as an input reference? The signal from
>this same 50 Ohm feedline?

Yes, I just turn to SSB where AGC seems to have much less effect
(if working at all) and "touch/don't touch" the resitor. The
effect on volume is very noticeable. Unfortunately the ICF-7600G
has no s-meter.

>73's
>Richard Clark, KB7QHC

Thanks,

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3296. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 08:22:38 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <8piik0hlodpnhib4pgdrsp40da2p7gmrdm@4ax.com>
Source record: 89517

Hi Helmut,

En Helmut Wabnig va escriure en Wed, 15 Sep 2004 17:47:43 +0200:

>On Wed, 15 Sep 2004 11:08:21 +0200, Toni <post_to_usenet@hotmail.com>
>wrote:

>>I have a Sony radio for SWL and I have seen that if I parallel a
>>300 ohm resistor to the antenna input the received signal drops
>>considerably [1]. I think this means the receiver's input
>>impedance is much greater than the normal 50/75 ohms. This makes
>>me wonder two things:
>>
>>- How can I measure the approximate value of the receivers input
>>Z? I don't want to know the exact value, just to know if it is in
>>the 500 / 1K / 10K range. I guess I can do this by paralleling
>>increasingly valued resistors until there's not much effect on
>>signal and assume that it about half that resistor's value.
>>
>>- Having a 50 ohm feedline, would I benefit by using a 4:1 balun
>>in reverse at the rcvr input? What kind of balun could I use for
>>that? It would be great if it also provided some improvement of
>>CMRR for noise picked by the feedline itself.

>Buy a cheap passive antenna tuner, e.g. the YAESU FRT-7700
>or the one from MFJ Enterprises.

This is just what I wanted to avoid. I just wanted a
better-than-nothing approach that doesn't require retuning at
every band change. Aside, having no s-meter it would probably be
difficult to calibrate the tuner.

Something different would be a pasive preselector. I will
probably buy or make one, but this is a different beast.

>Forget that idea with the resistors.

You will excuse me but I don't see why. It may not be a high-tech
computer-controled impedance analyzer but I just need
order-of-magnitude precision, I don't even need the first digit
to be much accurate.

Thanks for your comments

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3297. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 08:50:36 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <7bjik01fjsado7hrv8583h2itca4kqfbg1@4ax.com>
Source record: 89518

En Robert Casey va escriure en Wed, 15 Sep 2004 18:59:23 GMT:

>Toni wrote:
>>
>> I have a Sony radio for SWL and I have seen that if I parallel a
>> 300 ohm resistor to the antenna input the received signal drops
>> considerably [1]. I think this means the receiver's input
>> impedance is much greater than the normal 50/75 ohms. This makes
>> me wonder two things:
>
>The input impedance will vary depending on the receive frequency.
>It's something that isn't much worried about in radio design for
>SW.

Yes, I think this must be the case, but even if it varies I think
it will go up/down to double/half or triple/one third, I don't
think (hope not) it goes to 10x / 1/10th. That's why I don't want
to try to perfect-match, just same order of magnitude match

>As the radio's AVC circuits will make up for gain losses due
>to mismatches. Also realize that the receiver's front end
>noise is much less than the amount of noise produced by the
>natural and man made environment. That would limit how much DX
>you can do. A perfect match of antenna to front end would just
>deliver more noise along with signal, and would be indistinguishable
>from a mismatch with the AVC making up the missing gain. I'm
>talking about around 10dB mismatches here.

Well, the case is that I've been playing, among others, with
untuned shielded loops, and they really help reduce interference
by carefully turning them. Unfortunately they also produce very
low signal level, close to the point of not hearing much
difference in background noise when connecting/disconnecting the
antenna. That't why I'd like to gain those extra 5~10 dB by
mathing the receiver to the feedline.

Aside, the ICF-7600G is possibly the best receiver I have had so
far in sensitivity and selectivity, matching, if not improving,
my TS-570-DG transceiver. It is also great for carryng arround.
(I know I shouldn't make free publicity...)

Thanks for your comments

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3298. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 15:25:16 UTC
From: Thierry <http>
Message-ID: <4149b061@news.vo.lu>
Source record: 89519

I 've got te answer

I wonder first if dBW depended or not on the QRG below 30 MHz.
It doesn't (excepting that over 30 MHz there is less noise temperature and
often transverter in front of TX showing a 20 dB gain, and this figure is
thus till less).
In addition dBm and co are defined by IARU recommendations where I found all
equivalence dBm-S-point-dBW.

Thanks for your answers but I never imagine that at receive the true power
was so low. I add well a signal report and equivalent in dB or dBW but I
never really make this relation.

Thierry, ON4SKY

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:ci9tgn$p1$1@newshost.mot.com...
>
> "Thierry" <to answer direct see http://www.astrosurf.com/lombry/post.htm>
> wrote in message news:41481fd2@news.vo.lu...
> > Hi,
> >
> > A question about dBW and power at receive.
> > Among scales used in power measurement, there is the signal strength or
> > noise level estimation, also known as the "dB below W" (dBW or SDBW).
Its
> > relation is dBW = 10 Log P, where P is the power expressed in watt :
> > That means that 100 W is 20 dBW into 50 ohms.
> >
> > But usually, in propagation program (VOACAP, etc), the power strength at
> > receive expressed in dBW is far below such values. I read somewhere the
> next
> > equivalences :
> > - (minus) 93 ~ S9+10, -103 = S9, -127 = S5, -151 = S1.
> >
> > With -93 dBW for a S9+10 signal at receive, that 'd mean that the power
'd
> > be only P(W) = 10^ (dBW/10) = 0.7 watt ?
> > IMHO this power is much to low... What is wrong in this relations (or
in
> my
> > interpretation) ?
> > Thanks in advance
> > Thierry, ON4SKY
> > http://www.astrosurf.com/lombry

> >
> >
>
> As others pointed out, your calculation is wrong and that .7 W is way too
> large for received power. We receive powers in the -123 dBm (-153 dBW)
> range easily and that's ok
>
> However, it is not clear from your post just what you want to
do/ask/learn.
> What is your number too low for? What are you wanting?
> --
> Steve N, K,9;d, c. i My email has no u's.
>
>

3299. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 15:27:31 UTC
From: Thierry <http>
Message-ID: <4149b0e7$1@news.vo.lu>
Source record: 89520

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ssogk09bb4agsvpdrbf7u40r5v8pljivkp@4ax.com...
> On Wed, 15 Sep 2004 12:56:16 +0200, "Thierry" <to answer direct see
> http://www.astrosurf.com/lombry/post.htm> wrote:
>
>...
>
> Hi Thierry,
>
> S-9 is the reference point for a 50 V signal into the receiver's 50
> Ohm input. This is -73dBM (level below one milliwatt). Translating
> to levels below one Watt is performed by subtracting another 30 (the
> milli) dB - hence -103dBW.
>
> Power is a curious thing. Transmitter efficiency as measured by the
> target population that receives the signal is pitiful. If every
> person on the planet had a radio that picked up your 100W signal with
> S-9 level, you would be pumping 99.9% of your 100W into the void
> without anyone missing it anywhere. Efficiency < 0.1%
>
> Given that you are NOT heard by everyone (they don't care to listen),
> then transmitter efficiency plunges at least 7 or 8 more orders of
> magnitude. Efficiency < 0.00000001%

You really put the finger on something that I ignored during 25 years of ham radio, hi !...
I know the correspondence between power expressed in dB or dBm, dBW but I never see that under that angle...

Thanks
Thierry, ON4SKY
>
> 73's
> Richard Clark, KB7QHC

3300. carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 15:39:50 UTC
From: Thierry <http>
Message-ID: <4149b3ca$1@news.vo.lu>
Source record: 89421

Hi,

Have you some experience on the air using a Carolina Windom 40m long
compared to a G5RV 31m (100 ft) long...
I have the experience of G5RV but not the Windom yet.
The objective is using them for local qso but also dx in ssb (according to
their possibilities, thus not up to reach JA from ON or maybe via the
grayline, to see..)

I am going to install both (in NS and EW direction) but I really don't know
which is best or if they are really on par.

The Windom comes with 2 traps (1 per segment, as the standard design), a 6:1
balun ended with a coax. The G5RV is multiband too, without traps and uses a
4:1 balun ended with a 10m ladder line (standard design) , then a coax.
There is this already 2 or 3 hardware differences.

Knowing that one segment of the Windom is shorter, does it impact negatively
the radiation pattern with e.g. more sensitivity to QRM or other "defect"
that G5RV doesn't show ?

NB. I could use HFANT or MutiNEC to simulate that but that required to input
all antenna parameters first to design it before ask the program to simulate
its pattern... a field experiment is faster and welcome ;-)

Thanks in advance

Thierry, ON4SKY

3301. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 16:03:12 UTC
From: richardharrison@webtv.net
Message-ID: <7994-4149C750-726@storefull-3252.bay.webtv.net>
Source record: 89427

Thierry, ON4SKY wrote:
"With -93 dBW for a S9+10 signal at receive, that`d mean that the popwer`d be only P (W) = 10^ (dBW/10) = 0.7 watt?

I`m familiar with received carrier power expressed in dBm. -93 dBW is a number, 30 dB less if expressed in dBm, or -123. This is a strong signal for a narrow-band receiver.

Across 50 ohms, 1 watt is sq rt PR, or 7.07 volts.

93 dB is about 45,000 times, as a voltage ratio, so a received voltagw of -93 dBw is about 0.00016 volts, or 0.16 millivolts, or 160 microvolts.

S9+10dB is a strong signal. So is 160 microvolts. I`ve read that each "S-unit" is 6 dB. S-1 would be 18 dB less than S9+10 db, and that`s a voltage ratio of 7.94. S-1 would be about 20 microvolts, and well above the threshold of most receivers.

Best regards, Richard Harrison, KB5WZI

3302. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 16:05:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k9djk09pn7jckam446mqq5v1c0ogp25mc1@4ax.com>
Source record: 89422

On Thu, 16 Sep 2004 17:39:50 +0200, "Thierry"
<http://www.astrosurf.com/lombry> wrote:
>The objective is using them for local qso but also dx in ssb (according to
>their possibilities, thus not up to reach JA from ON or maybe via the
>grayline, to see..)

Hi Thierry,

One application (local/DX) has to suffer at the expense of the other.
YOU have to choose which application you want as first choice.

>I am going to install both (in NS and EW direction) but I really don't know
>which is best or if they are really on par.

This is another choice YOU have to make. What do YOU want to do? If
it is grayline, you cannot do this very effectively with a dipole
going North/South.

Even going East/West will not result in the best if you work stations
mostly in a ENE/WNW Great Circle bearing.

You need to use a propagation program like WinVOA to see what design
you need (dipole orientation that is) and then build to that bearing.
If you build two antennas that are crossed (and even if one is Windom
and the other G5RV); then you will have a suitable solution -
somewhere (even if you drive them both and phase them).

>There is this already 2 or 3 hardware differences.

These are practical problems of construction, not operational results.

>Knowing that one segment of the Windom is shorter, does it impact negatively
>the radiation pattern with e.g. more sensitivity to QRM or other "defect"
>that G5RV doesn't show ?

Short answer: NO. Long answer: Yes.

>a field experiment is faster and welcome ;-)

Only if we happen to be a neighbor - quel dommage.

73's
Richard Clark, KB7QHC

3303. Re: Good Antenna for Attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 16:24:28 UTC
From: "Randy A. Hefner" <randy_NO_SPAM_PLEASE_@murs-usa.com>
Message-ID: <2qtsojF13nnhgU1@uni-berlin.de>
Source record: 89423

Here is an antenna for sale on eBay. I am not selling it or recommending the seller. This is just an example of a very good scanner antenna. Not good for transmitting, though.

http://tinyurl.com/593dm

"Matt" <nospam.hciss@yahoo.com> wrote in message news:10khvsh7b9fad94@corp.supernews.com...
> Looking for a broadband scanner antenna for my attic. Would like 29-900Mhz
> receive and TX on 150 & 450Mhz ranges. TX is not that important really.
> Any suggestions?
>
> Matt
>
>

3304. Where to locate low pass filters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 16:32:19 UTC
From: Tod Glenn <webmaster@cordite.com>
Message-ID: <webmaster-18E3F2.09321916092004@corp.supernews.com>
Source record: 89424

Pardon the stupid question, but where is the best place to locate low pass filters? Closer to the antenna or the receiver?

I am finally setting up my base station and I need to know the best location for my low pass filter.

Thanks,

Tod
N7JQW

3305. Re: Where to locate low pass filters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 16:40:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j6gjk0h6oqj56n0imkrmfiooom9oibrcf9@4ax.com>
Source record: 89425

On Thu, 16 Sep 2004 09:32:19 -0700, Tod Glenn <webmaster@cordite.com>
wrote:

>Pardon the stupid question, but where is the best place to locate low
>pass filters? Closer to the antenna or the receiver?

Hi Todd,

You want high pass filters for a receiver with the roll-off frequency
set at the lowest end of your listening range. This is usually the AM
band's top end to keep their power out of your receiver's front end.

Low pass filters are for transmitter outputs to reduce spurs and
harmonics (and should be as close to the source as possible).

73's
Richard Clark, KB7QHC

3306. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 17:06:02 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <jbhjk095k9qjs327hfbn4ucam8nugcni89@4ax.com>
Source record: 89426

On Tue, 14 Sep 2004 22:48:04 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>I'll allow a wine-assisted imagination to wander around my own history.
>
>I came across Gibbs around 1948 by accident while searching for more
>information on transmission lines in general. Google had not been invented.
>He appears to have made his name known (no doubt also in other matters)
>because of his "Gibb's Phenomenon", an overshoot of some kind in an
>extension of Fourier's Waveform Analysis. At the time I had no interest in
>'overshoots' and forgot all about it. My ignorance about Gibb's other work
>has continued ever since. I appologise for no mention of his name in
>connection with tidying up Maxwell's work. And there's no reason at all to
>resurect the Boston Tea Party.
>
>Heaviside died in solitude in 1925. I was born during a freezing 6-feet
>deep snow-storm 9 months later. I sometimes like to think there is a
>spiritual connection.
>
>Mother was a little hard-working woman who took in laundry and
>clothes-ironing from the slightly better-off classes. Father was a
>30-shillings a week iron-bolt header but the national General Strike was
>imminent. In his spare time he taught himself to drill holes in ebonite
>panels using a red-hot poker the smell of which began my technical
>education. But he could solve quadratic equations in his head without the
>use of pencil and paper or any knowledge of algebraic symbols. I never
>understood how he did it. Although he lived to the age of 90 he could never
>explain it himself.
>
><snip>
>
>Around 1951, as a sideline with other duties, while working in the
>Engineer-in-Chief's Office of the British Post Office, I first became
>involved with the location of faults on transmission lines. Then, for a
>period, I specialised in faults on the then new deep-sea coaxial cables with
>submerged valve-type repeaters (amplifiers). Transistors were not good or
>reliable enough.
>
>I worked alone but with the facilities of a shared workshop and staff. My
>boss was an ex-cable ship Cable Testing Officer, a Ph.D, I think next to the
>captain in rank, who always said the only doctor in his family was his
>brother, a doctor of medicine. His name was Bray and he had the knickname,
>when not in his company, of "The Vicar".
>

><snip>
>
>I became involved with reflection coefficients, etc., in the frequency range
>0.1Hz up to HF using rectangular-waves and sinewaves. The Dollis Hill,
>Research Depapartment laboratories (the PO Bell-Labs) made me a 0.1 to 100
>Hz, balanced-and-screened output transformer, to be used in a power
>amplifier, a test signal generator. The amount of 10-thou, mu-metal used in
>it necessitated a special order being placed on the lamination manufacturer.
>
>I had to make my own precision 0-to-11.111 microfarad, 5-dial, variable
>capacitor entirely out of specially made polyethylene-dielectric metal-cased
>capacitors. Absorption with all other dielectrics was far too high at 0.1Hz
>to make accurate impedance bridge measurements. Mica was awful!
>
>Incidentally, apart from research work, the only occasion this capacitor was
>used for a practical purpose was to locate a fault on a land cable when I
>was in Sweden. The embarrassed Swedish engineers were not aware the fault
>existed. Needless to say I promised aboard the ship on my departure not to
>include the incident in my report. And I didn't. The Vicar, with his cruel
>sense of humour, was not altogether happy but for technical political
>purposes I had him by the balls. He was really a kind fellow and before
>retirement he ended up as Head of the PO Engineering Training College.
>
>Some years later I had the idea of donating the transformer and capacitor to
>the Science Museum in London. But some other equally sentimental collector
>had already stolen them. I sometimes wonder (2004) where they are now.
>
><snip>
>
>But this is a long way from the much neglected Heaviside.
>
>During the course of my fault location research I ran into a mental
>blockage. Ultimately, I had to translate the appearance of the reflected
>waves, as appeared on a 10 second persistance cathode ray tube, a function
>of time, into miles from one end of the cable. That is all the ship's
>captain needs to know before he can leave port and set a course. He can then
>retire to his lonely cabin with a bottle of duty-free scotch if he should so
>wish.
>
>Eventually I discovered Heaviside's Operational Calculus. Lo and behold,
>winding the handle on a German mechanical calculating machine, there
>appeared on a sheet of graph paper the same shaped curves as on the
>long-persistence CRT. The fault locating equipment was eventually installed
>at oceanic terminal stations. I had the oportunity to use it on the first
>breakdown to occur on the relatively short Middlesborough-Gothenburg cable
>which, as usual, was due to an unknown fishing trawler in the north sea.
>
>All the learned arguments on this newsgroup about SWR, the various
>reflections and virtual this that and the other, occur because time is
>ignored. It is admitted time does complicate matters. But Heaviside sorted

>transient matters out, versus time, many moons ago.
>---
>Reg.
>
Reg, your 'wine assisted imagination wandering around your own history' gave me a marvelous insight into you as a person. I'm delighted to know of the exacting and profound activities you have experinced. As I said earlier that telling of yourself is not bragging. I find that the more one knows about a person the more or less respect one has for him. In your case it is indeed much more.

Thank you for that marvelou insight.

Walt

3307. Re: Good Antenna for Attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 17:14:55 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <59ijk0hnvllsdqbd47rv3b89alua1irs6d@4ax.com>
Source record: 89428

On Wed, 15 Sep 2004 21:50:59 -0500, "Matt" <nospam.hciss@yahoo.com>
wrote:

>Looking for a broadband scanner antenna for my attic. Would like 29-900Mhz
>receive and TX on 150 & 450Mhz ranges. TX is not that important really.
>Any suggestions?
>
>Matt
>

The Radio Shack 25-1300 Mhz discone antenna is relatively cheap. Not
the most robust, but for an attic may be just fine.

bob
k5qwg

3308. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 17:15:05 UTC
From: Walter Maxwell <w2du@iag.net>
Message-ID: <m5ijk0hb3c4tj0vmchlc8uh25nk674oro7@4ax.com>
Source record: 89429

On Thu, 16 Sep 2004 16:05:39 GMT, Richard Clark <kb7qhc@comcast.net> wrote:

>On Thu, 16 Sep 2004 17:39:50 +0200, "Thierry"
><http://www.astrosurf.com/lombry> wrote:
>>The objective is using them for local qso but also dx in ssb (according to
>>their possibilities, thus not up to reach JA from ON or maybe via the
>>grayline, to see..)
>
>Hi Thierry,
>
>One application (local/DX) has to suffer at the expense of the other.
>YOU have to choose which application you want as first choice.
>
>>I am going to install both (in NS and EW direction) but I really don't know
>>which is best or if they are really on par.
>
>This is another choice YOU have to make. What do YOU want to do? If
>it is grayline, you cannot do this very effectively with a dipole
>going North/South.
>
>Even going East/West will not result in the best if you work stations
>mostly in a ENE/WNW Great Circle bearing.
>
>You need to use a propagation program like WinVOA to see what design
>you need (dipole orientation that is) and then build to that bearing.
>If you build two antennas that are crossed (and even if one is Windom
>and the other G5RV); then you will have a suitable solution -
>somewhere (even if you drive them both and phase them).
>
>>There is this already 2 or 3 hardware differences.
>
>These are practical problems of construction, not operational results.
>
>>Knowing that one segment of the Windom is shorter, does it impact negatively
>>the radiation pattern with e.g. more sensitivity to QRM or other "defect"
>>that G5RV doesn't show ?
>
>Short answer: NO. Long answer: Yes.
>
>>a field experiment is faster and welcome ;-)
>
>Only if we happen to be a neighbor - quel dommage.
>
>73's

>Richard Clark, KB7QHC

Hi Thierry,

If I may put in my two-cents worth, a dipole is a dipole. The G5RV is a dipole and the Caroling Windom is a dipole. Except for their use on harmonically ralated bands the radiation is the same for each. Any different radiation pattern on harmonically related bands results only from a difference in lengths of the dipoles. The dipole length of the traditional G5RV is 102 feet. If the Windom is cut for some longer length the pattern will be somehwhat different on the higher harmonic bands, but the difference will be rather insignificant.

Walt, W2DU

3309. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 17:45:11 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <75adnU10X5OFTNTcRVn-hA@comcast.com>
Source record: 89430

Roy,

You are right (as per usual). I didn't check the MFJ269 open circuit readings. At 30 MHz, with the N to UHF adapter installed, open circuit Z is 0 & j656. Since my capacitor readings were about 10% less than that, my guess is that the resistor reactances were actually about 1/10th of that (~1 PF). If I remove the N/UHF adapter, x rises to 1389. So, most of the C is in the adapter, which was in place. I think the 12 Ohm data is OK. The capacitance washed out, and it showed a series inductance of 21 nH.

As I said, this is not a precision instrument. Unfortunately, it is less precision than I thought. I hope that somebody with access to an HP or similar instrument will feel inspired to measure some resistors at RF. Meanwhile, I am going to look at some resistor manufacturers web sites.

Tam/WB2TT

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:10ki4tdsop53683@corp.supernews.com...
> It's much more likely that the shunt capacitance is in the MFJ.
>
> Calculate the parallel impedance of 11 + j0 (the presumed resistor) and
> 0 - j600 (the shunt C) and you'll see that you wouldn't be able to see the
> shunt C when making the 11 ohm "sanity check".
>
> Even at HF, measurements aren't nearly as simple as they sometimes seem
> they should be.
>
> Roy Lewallen, W7EL
>
> Tam/WB2TT wrote:
>>
>> Hi Gary,
>>
>> I just measured some random 1/2W carbon resistors with an MFJ at 30 MHz.
>> This is not a precision instrument, but shows a trend.
>>
>> Nominal Measured
>> 5.6 K 0 - j586
>> 220K 0 -j 600
>> 1.8K 99 - j539 (convert this to parallel form)
>>
>> As a sanity check
>>
>> 11 Ohms 12 + j4 (some lead inductance here)

>>
>> What this is tending to show is that the resistors are showing a shunt
>> capacitance whose reactance is about 600 Ohms at 30 MHz. That is about 9
>> PF, which seems high. I was expecting more like 1 PF. I want to redo this
>> at a higher frequency, might be out of range for the MFJ.
>>
>> I notice my Kenwood power meter uses a capacitive divider for the voltage
>> sample. A friend of mine built a meter along the lines of what you want
>> to do. I will ask him what he did.
>>
>> Tam

3310. Re: Where to locate low pass filters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 17:46:06 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2qu273F147e3vU2@uni-berlin.de>
Source record: 89431

Between the audio output and the woofer.

"Tod Glenn" <webmaster@cordite.com> wrote in message
news:webmaster-18E3F2.09321916092004@corp.supernews.com...
> Pardon the stupid question, but where is the best place to locate low
> pass filters? Closer to the antenna or the receiver?

3311. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 18:01:54 UTC
From: richardharrison@webtv.net
Message-ID: <1710-4149D512-813@storefull-3251.bay.webtv.net>
Source record: 89432

Toni wrote:
"---if I parallel a 300 ohm resistor to the antenna input the received signal drops considerably."

Toni says he is not interested in high accuracy, just an idea of what his receiver impeance is. He is on the right track. If two identical resistors are paralleled across a voltage source, each takes the same current. The portable radio antenna is probably a current source due to its high capacitive reactance in the too-short antenna. That makes the voltage out proportional to the impedance loading the antenna.

Forget the .7 vs. .5 of the power vs. volts relations. All you want is a rough estimate of the receiver`s input impedance. Just use common carbon resistors to find which cuts your received level from a weak signal (not to get AVC involved) to about half what it is without the parallel resistor.

Best regards, Richard Harrison, KB5WZI

3312. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 18:56:07 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409161056.d715514@posting.google.com>
Source record: 89433

Toni <post_to_usenet@hotmail.com> wrote in message
>
> Well, the case is that I've been playing, among others, with
> untuned shielded loops, and they really help reduce interference
> by carefully turning them. Unfortunately they also produce very
> low signal level, close to the point of not hearing much
> difference in background noise when connecting/disconnecting the
> antenna. That't why I'd like to gain those extra 5~10 dB by
> mathing the receiver to the feedline.

Why don't you just tune the loop? That would cure the level problem,
and also reduce out of band signals. I do agree with the other poster
though. It doesn't take much to provide a usable s/n ratio on HF. If
the noise level increases when you connect the antenna, it should be a
good enough match. MK

3313. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 19:58:50 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cicr9q$25b$1@sparta.btinternet.com>
Source record: 89434

At HF it's all very simple.

To summarise -

The S-meter is essentially a 50-ohm power or wattmeter.

It is correctly calibrated with a 50-ohm signal generator with its open-circuit volts set to 100 microvolts. The S-meter should then read S9.

Therefore, at the standard S9, the input to the receiver is 50 microvolts across 50 ohms, corresponding to a power input of 50 picowatts.

The standard S-unit = 6 dB.

So for each change of one S-unit the input voltage halves (or doubles).

At S-zero the input voltage is 50/512 = 0.1 microvolts, which is roughly equal to the the internal noise level of a good receiver with a bandwidth of a few KHz.. Theoretically this is about the noise level you should get when the antenna is disconnected.

At S9 + 40dB the input voltage is 50*100 microvolts = 5 millivolts.

Some S-meters may indicate as high as S9 + 60dB. The input voltage is then 50 millivolts which is about the overload point of a very good receiver.

So the whole scale is calibrated logarithmically, with S9 being about half-way along it, and with 54 dB below S9 and 40 or 60dB above S9. The input voltage range is from from 0.1 microvolts to 5 or 50 millivolts.

==========

However, all meters have indicating errors. The problem arises because of the difficulties and great expense in designing and manufacturing receivers with an agc meter system which can accommodate a signal level range of 54 + 60 = 114 dB. Economics invariably rules the roost.

(It helps to have very high receiver gain and attenuators at or near the receiver input.)

Fortunately modern receivers all tend to have errors of the same sort and sign. So amateurs using different manufacturer's receivers will exhange very similar signal strength reports.

These errors congregate at the very small signal end of the range. Meter calibration begins to go wrong at around or below S4 or S5. Meter readings of, say, S1 or S2 may actually be appropriate to power levels of S3 or S4. A meter reading of S-zero may be appropriate to a power level of S2 or S3.

That is, at very small signal levels the S-meter underestimates signal power level. But it's not of great consequence. At HF, to which the foregoing applies, signals are usually below the noise and QRM levels anyway.

Reg.

3314. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 20:34:52 UTC
From: richardharrison@webtv.net
Message-ID: <19621-4149F8EC-831@storefull-3258.bay.webtv.net>
Source record: 89435

Cecil, W5DXP wrote:
"You don`t really think that our present Big Bang was the first one ever, do you?"

Suppose that in a time line of infinite length, with no beginning and no end, there are really no unique events? Everything repeats sooner or later, does it?

Best regards, Richard Harrison, KB5WZI

3315. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 20:48:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cicu62$6d3$1@sparta.btinternet.com>
Source record: 89436

Taking one band with another and one direction with another, the difference between a Windom and G5RV will be entirely undetectable.

They will both have somewhat poorer performance than a simple random length dipole of about the same length and height fed over a random length, high impedance, any Zo, open-wire line.

Following the study you have given to the subject, you may be disappointed at the responses to your question, But you did ask.

And there's no reason why you should be deterred from experimenting with either or both types of antenna. You will then be at least as wise as us Old Wive's.

If you should like playing with just a few numbers then amuse yourself with small programs DIPOLE3 and ENDFEED. Download from website below in a few seconds and run immediately. They provide lots of data but the most important thing is the single number - radiating efficiency!

....
Regards from Reg, G4FGQ
For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
....

3316. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 21:01:21 UTC
From: k4wge@arrl.net
Message-ID: <7b671b4e.0409161301.5f3b6807@posting.google.com>
Source record: 89437

Richard Clark <kb7qhc@comcast.net> wrote in message
news:<sl7ek0hcvfr1t9vio5s7rat6gf9ekqm3qi@4ax.com>...

>>http://www.uri.edu/news/vincent/boxboro_files/frame.htm

> from the revolutionary conceptualist:
> "The term radiation resistance is a carry over from the very
> early days of radio and was used as a book keeping method to
> satisfy at that time the laws of physics."
>
> from the early days (1907) of radio:
> R = (1600 ï¿½ hï¿½ / wavelengthï¿½) ï¿½ Ohms
>
> Substituting the known h (12 feet) and the known wavelength (40M) to
> "satisfy at that time the laws of physics":
> R = 9 Ohms
>
> from the revolutionary conceptualist:
> "THE FAILURE MECHANISN WAS ...
> FROM IxR LOSS ... EVEN WITH LOW
> POWER (100 WATTS)"
> ....
> "THIS MEANS THAT THE HELIX AND THE LOAD COIL WILL NOT
> DISSIPATE ANY APPARENT POWER AND THE ONLY POWER
> DISSIPATED WILL BE I x R POWER OR JUST THE LOSS OF
> POWER CREATED FROM RESISTANCE OF THE LOAD COIL
> WINDING. (i. e. resistance of the wire)"
>
> And as for those fraudtenna legal concepts:
> "THIS IS PATENT PENDING TECHNOLOGY
> ...
> DOING ANY OF THE ABOVE WILL INFRINGE ON THE PATENT AND RESULT
> IN LEGAL CONSEQUENCES FAR GREATER THAN YOU MAY EXPECT"
>
> :-)

Do you suppose he is getting legal advice from FAS?

3317. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 21:11:23 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040916171123.07480.00000753@mb-m18.aol.com>
Source record: 89438

>
>> And as for those fraudtenna legal concepts:
>> "THIS IS PATENT PENDING TECHNOLOGY
>> ...
>> DOING ANY OF THE ABOVE WILL INFRINGE ON THE PATENT AND RESULT
>> IN LEGAL CONSEQUENCES FAR GREATER THAN YOU MAY EXPECT"
>>
>> :-)
>
>Do you suppose he is getting legal advice from FAS?

Freak should hire him, or they should merge :-)
Pending technolgy, my aas, this crap is 60 years old.
One more big joke and bad image of decent hams.
Mr. DLM should stick with fixing cafeteria equipment and leave the antenna
"business" alone.

Yuri K3BU.us

3318. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 21:18:23 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cicvuv$ft9$1@hercules.btinternet.com>
Source record: 89439

Anything which repeats itself is amenable to Fourier Analysis.

If there's a once-only event then Heaviside's Operational Calculus is appropriate.

It's not more difficult. It's just a matter of getting used to it.

==========

"Richard Harrison" wrote -
Cecil, W5DXP wrote:
> "You don`t really think that our present Big Bang was the first one
> ever, do you?"

3319. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 22:02:12 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cid2h4ksd1@hercules.btinternet.com>
Source record: 89440

All radio people suffer from delusions of measuring accuracy.

RF power measurements are the most inaccurate of all.

The accuracy of measurements are a function of the instrument user.

They who attempt to grasp support by stating the manufacturer's type number of the instruments used are most in need of the self-confidence it falsly generates.

Either that or the statements are gratuitous adverts.

How cynical can one get at this hour of the day?

3320. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 22:26:04 UTC
From: jgboyles@aol.com
Message-ID: <20040916182604.21100.00000676@mb-m07.aol.com>
Source record: 89441

>
>All radio people suffer from delusions of measuring accuracy.
>
>RF power measurements are the most inaccurate of all.
>
>The accuracy of measurements are a function of the instrument user.
>

>They who attempt to grasp support by stating the manufacturer's type number
>of the instruments used are most in need of the self-confidence it falsly
>generates.

Hi Reg. What exactly are you talking about? I had a few minutes in between
Hurricane Ivans wrath to get the Emergency generator cranked up and had a
chance to read this. Lucky you don't have these things in the UK.
73 Gary N4AST

3321. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 23:04:09 UTC
From: Thierry <http>
Message-ID: <414a1bf9$1@news.vo.lu>
Source record: 89442

Thanks for all comments.

I did a mistakle in my specs because they are no traps on the windom (I confused with W4DZZ).

In fact I thought that both designs being wire antennas of almost the same length, they 'd display the same radiation pattern at a few percent.
But I was focused on the shortest segment (1/3) of the windom and wonder whether it could cause or not additional problems or display drawbacks compared to a real dipole...
In all case I will test it in 2 weeks.
Problem with dipole3, the influence of a shorter segment is not taken into account. I don't know if that could be important, probably not much, but it 'd have been interesting to add some additional parameters like the length of each segment and the tilt of the tilt too to get a more accurate result.

Addition:
My believe is founded. I just find some radiation patterns and comments in the ARRL antenna book ch7-8. The windom is much more omnidirectional than a dipole. They say that "the system (windom) takes advantage of the asymmetry of the horizontal wires to induce current onto the braid of the vertical coax section.... The radiation pattern... tends to fill in the deep nulls that 'd be present ... if horizontally center fed".
globally they consider that the windom give better results due to the omnidirectional pattern or so than a true dipole.
Anyway, if I have the courage I will try to simulate the windom in Multinec.

Thanks for the help
Thierry, ON4SKY

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cicu62$6d3$1@sparta.btinternet.com...
> Taking one band with another and one direction with another, the
difference
> between a Windom and G5RV will be entirely undetectable.
>
> They will both have somewhat poorer performance than a simple random
length
> dipole of about the same length and height fed over a random length, high
> impedance, any Zo, open-wire line.
>
> Following the study you have given to the subject, you may be disappointed
> at the responses to your question, But you did ask.
>
> And there's no reason why you should be deterred from experimenting with
> either or both types of antenna. You will then be at least as wise as us

> Old Wive's.
>
> If you should like playing with just a few numbers then amuse yourself
with
> small programs DIPOLE3 and ENDFEED. Download from website below in a few
> seconds and run immediately. They provide lots of data but the most
> important thing is the single number - radiating efficiency!
> ---
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

3322. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 23:12:30 UTC
From: Thierry <http>
Message-ID: <414a1def@news.vo.lu>
Source record: 89443

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:k9djk09pn7jckam446mqq5v1c0ogp25mc1@4ax.com...
> On Thu, 16 Sep 2004 17:39:50 +0200, "Thierry"
> <http://www.astrosurf.com/lombry> wrote:
> >The objective is using them for local qso but also dx in ssb (according
to
> >their possibilities, thus not up to reach JA from ON or maybe via the
> >grayline, to see..)
>
> Hi Thierry,
>
> One application (local/DX) has to suffer at the expense of the other.
> YOU have to choose which application you want as first choice.
>
> >I am going to install both (in NS and EW direction) but I really don't
know
> >which is best or if they are really on par.
>
> This is another choice YOU have to make. What do YOU want to do? If
> it is grayline, you cannot do this very effectively with a dipole
> going North/South.
>
> Even going East/West will not result in the best if you work stations
> mostly in a ENE/WNW Great Circle bearing.
>
> You need to use a propagation program like WinVOA to see what design
> you need (dipole orientation that is) and then build to that bearing.
> If you build two antennas that are crossed (and even if one is Windom
> and the other G5RV); then you will have a suitable solution -
> somewhere (even if you drive them both and phase them).
>

Good idea, about simulation, I will try to create the windom design in
multiprop or hfant (I know the one of the dipole) and then run the voacap to
see what the matter.
FYI here is the pattern at short distance of a G5RV, 100W, tight EW,
http://www.astrosurf.com/lombry/Radio/soft-multiprop-on-la-12.gif
The windom should be more omnidirectional.

Thierry, ON4SKY

> >There is this already 2 or 3 hardware differences.
>
> These are practical problems of construction, not operational results.
>

> >Knowing that one segment of the Windom is shorter, does it impact
negatively
> >the radiation pattern with e.g. more sensitivity to QRM or other "defect"
> >that G5RV doesn't show ?
>
> Short answer: NO. Long answer: Yes.
>
> >a field experiment is faster and welcome ;-)
>
> Only if we happen to be a neighbor - quel dommage.
>
> 73's
> Richard Clark, KB7QHC

3323. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 23:26:39 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409161526.20a66602@posting.google.com>
Source record: 89444

"Thierry" <http://www.astrosurf.com/lombry> wrote in message
news:<4149b3ca$1@news.vo.lu>...
> Hi,
>
> Have you some experience on the air using a Carolina Windom 40m long
> compared to a G5RV 31m (100 ft) long...

Yea. I've tried both. They both are sort of lame compared to a normal coax fed dipole for a given band. I agree with Walt that a dipole is a dipole as far as pattern for a given band...The difference is how much power actually makes it to the antenna to be radiated. This is what separates the mediocre from the better.
If I wanted to work dx, I would use neither of those antennas. But you don't mention what band you want to work dx...The lower the band, the better the standard coax fed dipoles in general. But on the other hand, the lower the band, and the better a good vertical would work compared to the dipole. :/
Anything can work dx on the higher bands unless the radiation angles are way too high. If you want all bands with a single wire, I would use the standard dipole cut for the lowest band, and feed with ladder line and a good tuner. Or no tuner with the Cecil method...Myself, I prefer paralleled dipoles fed with a single coax. Don't need a tuner, and the efficiency is high. The G5RV and the common storebought windom both have fairly lossy feedline systems for my tastes. And the windom is prone to common mode problems, etc...I don't like an unbalanced antenna unless it's a last resort. MK

3324. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-16 23:58:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5v9kk09omhche8cg3h4anjolrg8kcgh2m7@4ax.com>
Source record: 89445

On Fri, 17 Sep 2004 01:12:30 +0200, "Thierry"
<http://www.astrosurf.com/lombry> wrote:

>FYI here is the pattern at short distance of a G5RV, 100W, tight EW,
>http://www.astrosurf.com/lombry/Radio/soft-multiprop-on-la-12.gif

Hi Thierry,

Hmmmm, I can see where the magnetic pole is.

73's
Richard Clark, KB7QHC

3325. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 00:03:10 UTC
From: Thierry <http>
Message-ID: <414a29cf@news.vo.lu>
Source record: 89446

Ok Mark, for sure for DXing a dipole or a windom is not a beam...
From europe in SSB and barefoot (100W in SSB), with my G5RV tight EW I reach FY, PY, midwest US, VU, 4S, UA9J,C, RA9 artic, central africa. Hard to go farther bu these days of SSN decreasing.

My objective is Dxing first as for local QSOs this is not a problem to get S9+.
I know very well that DX performances will be more than limited, all the more in SSB, but this is a temporary solution waiting for a small beam 3-or 4 ele.

Thierry, ON4SKY

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0409161526.20a66602@posting.google.com...
> "Thierry" <http://www.astrosurf.com/lombry> wrote in message
news:<4149b3ca$1@news.vo.lu>...
> > Hi,
> >
> > Have you some experience on the air using a Carolina Windom 40m long
> > compared to a G5RV 31m (100 ft) long...
>
> Yea. I've tried both. They both are sort of lame compared to a normal
> coax fed dipole for a given band. I agree with Walt that a dipole is a
> dipole as far as pattern for a given band...The difference is how much
> power actually makes it to the antenna to be radiated. This is what
> separates the mediocre from the better.
> If I wanted to work dx, I would use neither of those antennas. But you
> don't mention what band you want to work dx...The lower the band, the
> better the standard coax fed dipoles in general. But on the other
> hand, the lower the band, and the better a good vertical would work
> compared to the dipole. :/
> Anything can work dx on the higher bands unless the radiation angles
> are way too high. If you want all bands with a single wire, I would
> use the standard dipole cut for the lowest band, and feed with ladder
> line and a good tuner. Or no tuner with the Cecil method...Myself, I
> prefer paralleled dipoles fed with a single coax. Don't need a tuner,
> and the efficiency is high. The G5RV and the common storebought windom
> both have fairly lossy feedline systems for my tastes. And the windom
> is prone to common mode problems, etc...I don't like an unbalanced
> antenna unless it's a last resort. MK

3326. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 00:27:14 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cidb12$681$1@hercules.btinternet.com>
Source record: 89447

Reg wrote >
> >They who attempt to grasp support by stating the manufacturer's type
number
> >of the instruments used are most in need of the self-confidence it falsly
> >generates.
>
> Hi Reg. What exactly are you talking about? I had a few minutes in
between
> Hurricane Ivans wrath to get the Emergency generator cranked up and had a
> chance to read this. Lucky you don't have these things in the UK.
> 73 Gary N4AST
============================

Gary, we have heard the news over here about the devastating Hurricane Ivan. We get them here at about 1/2 strength of yours only once every very few years. And even then it's only over a relatively small area.

If you can't understand what I am wittering about then its due either to the storm stress you are under or because you are one of those suffering from delusions of accuracy. In your case I prefer the former excuse.

I hope your generator started up OK and that you and your family suffer the bare minimum of danger and damage. At least communications between us are still intact. My best wishes.

Reg, G4FGQ

3327. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 01:26:48 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <5fidnX0St-DVoNfcRVn-oA@comcast.com>
Source record: 89448

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040916182604.21100.00000676@mb-m07.aol.com...
> >
>>All radio people suffer from delusions of measuring accuracy.
>>
>>RF power measurements are the most inaccurate of all.
>>
>>The accuracy of measurements are a function of the instrument user.
>>
>
>>They who attempt to grasp support by stating the manufacturer's type
>>number
>>of the instruments used are most in need of the self-confidence it falsly
>>generates.
>
> Hi Reg. What exactly are you talking about? I had a few minutes in
> between
> Hurricane Ivans wrath to get the Emergency generator cranked up and had a
> chance to read this. Lucky you don't have these things in the UK.
> 73 Gary N4AST

Gary,

I saw an interesting curve at a resistor manufacturer's web site. It plotted resistor error as a function of F(MHz) x R(Meg) for 1/4 W carbon resistors. To make a long story short, the resistor error will be about 20% where the Megahertz x MegaOhms = 1. That means the resistor value will be 1/ Frequency. So, at 30 MHz, the resistor will be in error by 20% if it is bigger than 1/30 =.033 Meg, or 33K. That, I believe ignores capacitive effects. Personally, I have never tried to put RF through a resistor bigger than a few hundred Ohms.

It occurs to me that you can ignore capacitive effects if you make all resistors identical. For instance, if you want a 3:1 divider make the series resistor 10K, and the shunt resistor two 10K resistors in parallel. Of course, you will need a high impedance load on it. Let's see if anybody shoots this down.

Tam

3328. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 02:37:36 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414a4deb$1_4@corp.newsgroups.com>
Source record: 89449

Walter Maxwell wrote:
> If I may put in my two-cents worth, a dipole is a dipole. The G5RV is a dipole
> and the Caroling Windom is a dipole.

Hi Walt, I don't know if you know or not, but the Carolina Windom
is designed for the vertical section to radiate so it has a
radiation pattern which is a combination of a dipole and a vertical.
--
73, Cecil, W5DXP

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3329. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 02:51:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4qgkk097s5kef14ih25uh4tu2h9lt66cds@4ax.com>
Source record: 89450

On Thu, 16 Sep 2004 21:26:48 -0400, "Tam/WB2TT"
<t-tammaru@c0mca$t.net> wrote:

>To make a long story short, the resistor error will be about 20% where the
>Megahertz x MegaOhms = 1.

And not so curiously Trc = 1 MOhm ï¿½ 1 pF = 10^-6
F = 1 / T
F = 1 MHz
perhaps the product rule should be:
Megahertz x MegaOhms x picoFarads = 1

The 20% error is, of course, simply the rolloff response at the RC
inflection point described by 1/Trc.

>Let's see if anybody
>shoots this down.

Hi All,

I think chipping at the clay feet of saints is more appropriate
metaphor.

What is the saint? The RF response of the resistor. It should be
suspect right out the gate. Being suspect, you employ the
conventional techniques already evidenced even by the cheapest Power
Meter builder (MJF) by swamping the stray capacitance with series
capacitors (paralleling the resistors). One capacitor is either
variable, or further paralleled with a trimmer. The saint is also the
unspecified requirement: is this divider BEFORE OR AFTER the detector?

If before, and thus subject to RF, the simple RC compensated divider
has served for eons. If after, and thus subject to only DC - who
cares? The one clay foot of the discussion.

The other clay foot of the discussion is that for placement before OR
after the detector, ALL ratios are post-hoc determinations (in other
words, design with variable components fully expecting you WILL be
wrong). Further, ALL descriptions to this point have been of
normalized levels. With the RC compensated divider, you are throwing
the knee if rolloff into lower frequencies so that ALL frequencies of
interest reside on the same slope. Hence the common "calibration"
procedure has you adjust the resistors for the low frequency readout,
and the capacitors at the high frequency readout. This "calibration"
is simply distributing the error so that it doesn't accumulate
outrageously.

The greater challenge is how do you know how much power you are setting your meter to read? Compounding errors are common in RF.

73's
Richard Clark, KB7QHC

3330. horizontal and vertical antenna on one mast

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 03:53:28 UTC
From: Ironhead <rp2000@verizon.net>
Message-ID: <Yct2d.12605$sX2.4259@trndny09>
Source record: 89451

I'm sure this has been answered before. Can I mount a 2M halo on the same mast as a 2M vertical (jpole) without any adverse affect on one another? If so, is there a certain space that needs to be between them? Thanks for any help.

KC2FYP

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.762 / Virus Database: 510 - Release Date: 9/13/2004

3331. Re: horizontal and vertical antenna on one mast

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 05:33:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8ftkk0p02u3ll0v3e4coitnh85qjnr9mb0@4ax.com>
Source record: 89452

On Fri, 17 Sep 2004 03:53:28 GMT, "Ironhead" <rp2000@verizon.net>
wrote:

>I'm sure this has been answered before. Can I mount a 2M halo on the same
>mast as a 2M vertical (jpole) without any adverse affect on one another? If
>so, is there a certain space that needs to be between them? Thanks for any
>help.

Hi OM,

They have different polarizations, so, in effect, they reside in each
other's null. On the other hand, the JPole is intrinsically Hi-Z and
can be disturbed by changes to its counterpoise (the metal beneath
it). However, once you tune them both up, they should live as benign
neighbors.

73's
Richard Clark, KB7QHC

3332. Re: horizontal and vertical antenna on one mast

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 05:54:31 UTC
From: dplatt@radagast.org
Message-ID: <10kkv0ng0f1l585@corp.supernews.com>
Source record: 89453

In article <Yct2d.12605$sX2.4259@trndny09>,
Ironhead <rp2000@verizon.net> wrote:

>I'm sure this has been answered before. Can I mount a 2M halo on the same
>mast as a 2M vertical (jpole) without any adverse affect on one another? If
>so, is there a certain space that needs to be between them? Thanks for any
>help.

Pretty much so, yes, as long as there's a reasonable vertical
separation between them. The halo's emission is horizontally
polarized, with a deep null "overhead", so it won't tend to "notice"
the mast or the J-pole. The J-pole's radiation is vertical, with a
deep null below, and the halo will have little effect on it.

I've got a Copper Cactus 2m/440 J-pole at the top of my mast, with an
aluminum-strip halo mounted about 6" below the bottom of the J-pole's
matching stub, with the halo's closest (grounded) side being about 3"
from the mast. I haven't run any field-strength studies, so I can't
say for sure, but as far as I can tell there haven't been any
significant changes in my ability to work local repeaters or simplex
stations on the J-pole, and the halo's sensitivity seems quite
acceptable for its type.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3333. Re: microsoft.public.jp.home.hagaki,microsoft.public.games.zone.allegiance,microsoft.public.kr.windowsxp.qna,free.it.tlc.provider.vittime,rec.music.makers.guitar.jazz

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 09:19:48 UTC
From: anyaparker@fantasymail.de
Message-ID: <c580e6a6.0409170119.7d8a559f@posting.google.com>
Source record: 89454
Cross-posted to: alt.electronics.analog.vlsi,microsoft.public.fox.events,netscape.public.mozilla.mstone,microsoft.public.it.bosbs,rec.radio.amateur.antenna

alt.electronics.analog.vlsi,microsoft.public.fox.events,netscape.public.mozilla.mstone,microsoft.public.it.bosbs,rec.radio.amateur.antenna
> microsoft.public.jp.home.hagaki,microsoft.public.games.zone.allegiance,microsoft.public.kr.windowsxp.qna,free.it.tlc.provider.vittime,rec.music.makers.guitar.jazz
> > ukonline.teens,ukr.archives,ukr.bicycle,ukr.business,ukr.commerce
> > > > > > > matt parker alias erik vonlunsen hout matt parker alias
> ericvonlint herzog matt parker alias erikvon lindt herzog matt parker
> alias ericvonlint hout matt parker is a liar from leuven louvain
> belgium and lives in cottage grove oregon matt parker alias ericvon
> lint matt parker alias c cct matt parker alias a parker matt parker
> stalks and tracks down clients to scam and blackmail them matt
> > > > > > > parker alias e vonlunsen hout members of eurobrides.com
> have access to adult material depicting minors in sexual acts matt
> parker is the most despicable shitass on the net matt parker alias e
> van lunsenherzog matt parker alias tanjadochenkova matt parker was
> born on 13 09 1965 matt parker alias nadejdazaitzeva matt parker alias
> kimberlyparker do physical material and moral harm to matt
> > > > > > > parker his wife and loved ones matt parker alias erik
vanlindt hout matt parker alias tatjanadochenkova matt parker alias
ericvan lint matt parker alias phrocrew matt parker alias sergeismith
matt parker alias ccc t never enter a true credit card number at
eurobrides.com matt parker alias bestdayisnow matt parker alias
chesslib matt parker alias michhele matt parker alias erik vanlint
> > > > > > > hout matt parker alias erikvonlunsen herzog matt parker
alias evon lint hout matt parker alias kimberly parker this is hard
evidence that this statement is completely true matt parker alias eric
vonlindt herzog matt parker alias tdochenkova matt parker was born on
09 13 1965 matt parker alias ericvan lunsen matt parker alias anya
parker matt parker alias erikparker matt parker alias e
> > > > > > > vonlunsenhout matt parker alias pcrew matt parker alias
erik vanlint herzog matt parker alias ericvanlindt hout matt parker
alias e van lindthout matt parker alias eparker matt parker alias evon
lindt herzog matt parker alias evon lint this statement is made in
loving memory of the university employee that was killed by matt
parker matt parker alias e vanlindtherzog matt parker alias
> > > > > > > tdchenka matt parker alias g aap matt parker alias erik
vanlunsen hout three university employees were fired due to the lies
of matt parker matt parker alias evonlunsen herzog matt parker alias
chess lib matt parker alias supermachine matt parker alias erik
vonlunsenhout matt parker alias erikvanlinthout matt parker alias e

van lunsenhout pin down the prick matt parker http://tinyurl.
> > > > > > > com/4cc39 matt parker alias erikvan lint herzog matt
parker alias evan lunsen matt parker threatens the life of those that
file complaints against his sites do not sign up at the scam site
trueloves.com matt parker alias e vanlunsen matt parker alias erikvon
lindtherzog matt parker alias erik von lunsen hout spam the child
molester matt parker off the web matt parker runs dating sites
> > > > > > > since people are unlikely to admit joining such sites by
> > complaining matt parker alias kimberleyparker matt parker alias erik
> > lint the date of birth of matt parker is 9 13 65 matt parker alias
> > erik vanlintherzog matt parker alias evonlint matt parker alias e
> > lindt matt parker alias michelle due to the lies of matt parker the
> > catholic university of leuven belgium fired three employees matt
> > > > > > > > parker alias dchenka tatyana dochenkova matt parker alias erikvanlint matt
parker alias mparker matt parker was exposed as a liar at
http://fravia.2113.ch/phplab/mbs.php3/mb001?num=1028133973&thread=1028133973 where he
posts as jeff and trueloves matt parker alias samsmith matt parker alias erikvan lindthout
matt parker forges server logs to make clients seem guilty of his criminal
> > > > > > > activities this statement is made pending the issue of the
> > official complaint against matt parker his mailbox is matt parker
> > alias anna parker po box 1147 cottage grove 97424 oregon usa matt
> > parker alias erikvonlunsenhout matt parker alias ericvon lindtherzog
> > matt parker is guilty of illegal people trafficking and will be
> > prosecuted matt parker alias d georg matt parker alias sex machines
> > > > > > > > matt parker of rainypasslodge.com supports illegal arms
> trafficking and terrorist activities matt parker alias eriklint matt
> parker alias erikvon lunsenhout matt parker alias e von lint hout matt
> parker alias evon lintherzog matt parker alias jerryjones matt parker
> alias sergismith matt parker alias ericvan lunsenhout matt parker
> alias erik von lindt herzog matt parker alias kim parker
> > > > > > > matt parker alias evonlint herzog matt parker alias
> erikvonlunsen hout matt parker alias erikvonlindthout matt parker
> alias ericvan lintherzog matt parker alias e van lindt matt parker
> alias erikvan lindt matt parker alias eric vanlunsen herzog matt
> parker alias ericvon lint herzog matt parker alias eric van lindt hout
> matt parker alias eric von lindtherzog matt parker alias ericvanlint
> > > > > > > matt parker alias eric van linthout matt parker will be
> > busted sentenced jailed and fried matt parker alias geronimojones matt
> > parker alias ericvan lindt matt parker alias evon linthout earn money
> > for every email address this chain letter is forwarded to matt parker
> > alias evanlindt hout matt parker alias evanlindthout matt parker alias
> > nadzaitz matt parker alias evanlunsen hout any useful
> > > > > > > information leading to the arrest of matt parker will be
rewarded matt parker alias phrozen crew matt parker alias evanlint
never submit true personal data to eurobrides.com matt parker alias
ericvon lunsen herzog matt parker alias erik van lunsen hout matt
parker alias e vanlindt herzog matt parker alias erikvan lunsen hout
matt parker alias http://www.erikvanlint.com matt parker is
> > > > > > > webmaster of eurobrides.com and all sites in ip range 66
70 45 10 to 39 matt parker alias erik vonlunsenherzog matt parker

alias e parker matt parker alias phillip crew matt parker is webmaster
of trueloves.com and all sites in ip range 66 70 45 10 to 39 matt
parker instigates hackers and other criminals against clients and
competitors matt parker alias erikvanlindthout this is hard
> > > > > > > evidence against matt parker http://tinyurl.com/59u3p matt
> > parker is a filthy motherfucker that likes computer chess games matt
> > parker alias c base the scam site trueloves.com is owned by the
> > pervert matt parker from cottage grove oregon matt parker alias erik
> > vanlindt matt parker alias jeff matt parker alias sexmachine matt
> > parker is a murderer and this son of a bitch will be fried matt
> > > > > > > parker alias erikvonlintherzog matt parker alias ericvan
> > lint herzog matt parker alias chessbase matt parker alias erik von
> > lindt matt parker alias erik von lindt hout matt parker alias
> > erikvanlunsen herzog matt parker alias eric von lintherzog matt parker
> > alias erik von lint make matt parker bleed http://tinyurl.com/v4oa
> > matt parker alias eric vonlunsen anybody providing proof of having
> > > > > > > harmed matt parker his wife and relatives will be rewarded
> > matt parker alias ericvanlunsenherzog matt parker alias best day isnow
> > matt parker alias e vonlindt hout matt parker alias philipcrew matt
> > parker alias erikvanlindtherzog matt parker alias geronimo jones matt
> > parker alias sexmachines his mailbox is matt parker alias erik vanlint
> > smolders pl 1 pb 223 leuven 3000 belgium matt parker
> > > > > > > alias erikvon lindthout matt parker alias erik van
> lunsenherzog matt parker alias erikvan lint hout boycott commercial
> dating sites matt parker alias erikvon lunsen hout matt parker alias
> smachines matt parker alias elindt matt parker alias e lunsen matt
> parker alias s machines matt parker alias erik van lunsenhout every
> occurrence of this statement is automatically submitted to search
> > > > > > > engines matt parker alias e vanlunsen herzog matt parker
alias erik vanlinthout matt parker alias evon lindtherzog matt parker
alias matt parker matt parker alias ericvon lunsenherzog matt parker
alias kimberley parker matt parker alias eric van lunsen hout matt
parker alias super machines matt parker alias ericvonlindt matt parker
alias deep shredder matt parker alias evanlindt matt
> > > > > > > parker alias erikvon lindt matt parker makes a living by
selling underage female flesh to pornographers and whoremongers matt
parker was born on 13 september 1965 matt parker alias erik lindt matt
parker alias eric vanlindthout matt parker alias erikvan lindt hout
matt parker is a dangerous mentally deranged criminal and needs
psychiatric confinement matt parker alias tanya dochenkova
> > > > > > > matt parker was exposed as a liar at http://tinyurl.com/6zs8c where he posts
as jeff and trueloves matt parker hacks mailboxes what constitutes violation of the
confidentiality of mail matt parker alias sex-machines the dismissed employees filed an
official complaint against matt parker with the us embassy matt parker alias evon lint
herzog matt parker alias eric van lintherzog matt
> > > > > > > parker is personally responsible for the death of a university employee lock
up the bastard matt parker http://tinyurl.com/5psmo matt parker alias erik vonlinthout
matt parker alias erikvonlint hout matt parker alias eric van lint matt parker alias
evanlintherzog matt parker alias e vonlunsenherzog pluck out the eyes of cuntface
http://tinyurl.com/4c2t5 matt parker matt parker alias

> > > > > > > bestday isnow matt parker was born on 13 september 65 matt
> > parker alias erik von linthout matt parker alias e von lindt herzog
> > matt parker alias evan lint hout matt parker alias erik van lindthout
> > matt parker alias tatianadchenka matt parker is a pedophile and child
> > molester with many fake pseudonyms and multiple personalities matt
> > parker is scum in a waste piece of skin this statement is
> > > > > > > not libelous and will under no circumstances be deleted
matt parker alias kimparker matt parker forges evidence to make others
seem guilty of his criminal activities matt parker alias e lint matt
parker alias chess base one of the dismissed university employees
committed suicide matt parker alias ericparker matt parker alias
erikvanlunsen hout matt parker alias eric vonlindthout matt
> > > > > > > parker spams the net with childporn http://tinyurl.com/3w4q7
> > nail down the cumbag matt parker http://tinyurl.com/58hwa matt parker
> > alias andyc matt parker alias ericvon lindt matt parker alias s smith
> > if this were not true matt parker would not bother to react to this
> > statement matt parker alias ericvan lunsen hout matt parker alias eric
> > von lindt hout matt parker alias ericvon lindthout
> > > > > > > matt parker alias erik vonlindthout matt parker alias eric
> > vanlintherzog matt parker alias phrozencrew matt parker alias e van
> > lindt herzog matt parker alias bestday is now matt parker alias
> > ericvanlinthout matt parker alias ericvonlindt herzog matt parker
> > alias e von lunsen herzog matt parker alias aparker matt parker alias
> > e von lint herzog matt parker alias e van lint hout matt parker
> > > > > > > alias erik von lunsenhout the leuven university fired three
> > employees due to the lies of matt parker matt parker alias evon
> > lindthout matt parker alias ericvanlunsen herzog matt parker alias
> > evonlunsenherzog matt parker alias ericvan lindt hout matt parker
> > alias erikvon lunsen matt parker alias ericvanlindt herzog matt parker
> > alias erik vanlindt herzog matt parker alias e von lunsen hout
> > > > > > > matt parker alias best day matt parker alias evon
> lunsenhout matt parker alias erik van lindt matt parker alias
> evanlunsen herzog matt parker alias sex machine matt parker alias erik
> vanlunsenherzog anybody providing proof of the death of matt parker
> will receive a huge reward matt parker alias ericvan lint hout there
> is a price on the head of the wanker matt parker matt parker alias e
> > > > > > > van lindtherzog matt parker alias dgeorg matt parker alias
> > peace now anna parker married a limpdick yank to escape prosecution in
> > russia this perfectly legal statement prevents further abuse by matt
> > parker matt parker alias ericvon lindt herzog matt parker alias evan
> > lint matt parker alias ann parker matt parker alias an dyc matt parker
> > alias erik von lunsen matt parker alias rmiller matt
> > > > > > > parker alias philip crew matt parker alias eric von
> lunsenhout anna parker is married to matt parker whose mother is the
> wife of a dog the site antiscam.org libels uninvolved females for
> unwarranted commercial purposes matt parker alias eric vonlint rebuild
> the cuntface of the spamming scammer matt parker
> http://tinyurl.com/452ch matt parker alias cy matt parker alias
> ccctournament matt
> > > > > > > parker alias annparker matt parker alias tatianadochenkova

> matt parker is a stinking piece of shit that likes role playing
> dungeons and dragons matt parker alias erik vanlindtherzog matt parker
> alias evanlunsen matt parker alias anna parker matt parker alias
> ericvanlindtherzog matt parker alias ericvanlunsenhout spam newsgroups
> with this statement matt parker alias evanlindt herzog matt
> > > > > > > parker hacks the email of his clients and violates the
> confidentiality of mail matt parker alias ericvanlunsen never submit
> true personal data to trueloves.com matt parker alias nzaitzeva matt
> parker alias e vonlindt herzog matt parker alias eriklunsen matt
> parker alias eric von lint herzog matt parker alias ericvan lindthout
> matt parker alias cbase matt parker alias bestdayis now matt
> > > > > > > parker alias e vanlint hout matt parker alias evonlindt herzog this statement occurs on thousands of other sites apart from google matt parker alias erik vanlint matt parker alias evan lindt hout matt parker distributes illegal software and warez that infringe the copyright law matt parker alias erikvonlindt herzog matt parker alias eric vanlint herzog matt parker alias aparker matt
> > > > > > > parker alias e von lindthout matt parker alias eric
> > vanlunsen matt parker alias tanja dchenka matt parker alias sam smith
> > matt parker alias evan lint herzog matt parker alias evonlindtherzog
> > matt parker alias eric vonlunsen herzog matt parker alias e
> > vanlunsenhout matt parker alias eric vanlint matt parker is a hacker
> > and stalker that steals personal data from hacked mailboxes matt
> > parker
> > > > > > > distributes illegal childporn on the net matt parker
> > illicitly distributes the private data of clients on the web matt
> > parker alias peacenow matt parker alias ericvan linthout the dismissed
> > university employees suffered financial loss due to matt parker the
> > scam site eurobrides.com is owned by the pervert matt parker from
> > cottage grove oregon matt parker is the lowest form of life on this
> > > > > > > planet matt parker alias jj matt parker alias
> > erikvanlintherzog matt parker alias sergejsmith matt parker alias
> > michele the date of birth of matt parker is sep 13 65 matt parker
> > alias eric von lint hout matt parker alias eric van lint herzog matt
> > parker sends death threats to dissatisfied clients matt parker alias e
> > van lunsen matt parker spams the shit out of clients and newsgroups
> > matt
> > > > > > > parker alias rage matt parker alias super machine matt parker alias anja parker matt parker alias e vonlinthout matt parker alias erikvanlint hout matt parker alias smachine matt parker alias m parker matt parker alias ericvonlindtherzog matt parker alias e vanlintherzog matt parker alias evonlindt matt parker alias evlhevlh matt parker alias e von lindt hout matt parker from cottage
> > > > > > > grove oregon spams the net with childporn
> http://tinyurl.com/6kmea do not sign up at the scam site
> eurobrides.com matt parker alias erik van linthout matt parker alias
> erik van lindt hout matt parker alias anyaparker matt parker alias e
> von lunsen matt parker alias evl matt parker alias eric lindt matt
> parker alias deepshredder matt parker alias phillipcrew matt parker
> was born on 13 09
> > > > > > > 65 matt parker alias ccct matt parker alias evanlunsenhout

> matt parker alias erikvanlunsenherzog matt parker alias evanlint
> herzog matt parker alias evonlintherzog matt parker alias ericvanlindt
> matt parker alias evan lunsen hout matt parker alias ericvan
> lindtherzog matt parker alias erikvon lint herzog matt parker alias
> ericvan lunsenherzog matt parker alias matthewparker matt parker
> > > > > > > alias eric parker matt parker alias f quisinsky matt parker
> > alias g jones matt parker alias nadejda zaitzeva matt parker alias
> > evan lintherzog matt parker alias evonlunsenhout matt parker alias
> > eric vonlunsenhout matt parker alias erikvonlint matt parker alias k
> > parker matt parker alias erik von lindtherzog matt parker alias
> > frankquisinsky matt parker alias eric vonlindt hout the truth of
> > > > > > > > this statement is proven by matt parker trying to delete or
> > refute it matt parker alias ccc tournament the date of birth of matt
> > parker is 9 13 1965 matt parker alias erikvonlinthout matt parker
> > alias ericvon lindt hout matt parker alias tanjadchenka matt parker
> > alias e vonlint matt parker alias e vonlint hout matt parker alias
> > ericvan lindt herzog matt parker alias eric vonlint hout matt
> > > > > > > > parker alias ericvonlunsen matt parker alias eric
vonlindtherzog matt parker alias e von lintherzog matt parker alias
erik vonlindt the date of birth of matt parker is 13 9 65 matt parker
alias elint matt parker alias evonlint hout matt parker alias tatiana
dchenka matt parker alias sergei smith matt parker sells underage mail
order brides on the web matt parker alias eric van lunsen
> > > > > > herzog matt parker is a belgian of mixed ethnical
> extraction living in cottage grove oregon matt parker violates the
> internet privacy act by distributing stolen personal data matt parker
> alias ladiet matt parker alias tanja dochenkova matt parker alias e
> van lint herzog matt parker alias evon lunsen matt parker alias best
> dayis now matt parker alias eric vonlindt matt parker alias erik
> > > > > > > vonlint herzog matt parker alias ericvon linthout matt parker alias e van
lunsen herzog never submit a real email address to eurobrides.com matt parker alias ericvon
lint hout matt parker alias michhelle matt parker alias t dochenkova matt parker alias
tanyadochenkova matt parker alias erik vanlunsenhout matt parker alias mattparker matt
parker alias e vanlint herzog never believe
> > > > > > anything matt parker says or writes matt parker alias jjones
> > matt parker alias erikvonlindtherzog matt parker alias robertmiller
> > his true name is matt parker from cottage grove oregon and that is
> > final matt parker alias ericvonlunsenherzog matt parker alias e
> > vonlindtherzog matt parker alias erik vanlunsen matt parker alias
> > erikvanlindt the date of birth of matt parker is september 13 65
> > > > > > > matt parker alias erik vonlintherzog matt parker alias
evon lunsenherzog matt parker alias aniaparker matt parker alias
erikvan linthout his real address is matthew s. parker 1505 ash ave
cottage grove 97424 oregon usa matt parker alias erikvonlunsenherzog
matt parker alias eric vanlunsenherzog hack the childporn site
http://tinyurl.com/6t7hd to pieces matt parker alias evan lindthout
> > > > > > matt parker alias evonlunsen matt parker alias ssmith matt
> > parker trades in teenage brides from russia and the philippines matt
> > parker alias eric van lindthout matt parker alias evan lunsenherzog
> > matt parker alias eric von lindthout matt parker alias erikvan lindt

> > herzog matt parker alias evlevl matt parker alias erik van lint matt
> > parker alias s machine matt parker alias e vanlinthout an
> > > > > > > official complaint against matt parker was filed with the
> us embassy matt parker alias evon lunsen herzog matt parker alias
> jerry jones matt parker alias eric von lindt matt parker alias eric
> vonlintherzog matt parker alias erik parker matt parker alias evan
> lindtherzog matt parker alias erik van lunsen herzog matt parker alias
> erikvon lintherzog matt parker alias gaap matt parker alias
> > > > > > > erik vanlunsen herzog matt parker alias erikvanlunsen matt
> parker infects computers with a nasty trojan virus matt parker alias
> ericvon lintherzog matt parker alias evon lindt hout matt parker alias
> e vanlunsenherzog matt parker alias evonlinthout matt parker alias
> erik von lint hout matt parker alias erikvon lindt hout matt parker
> alias erikvonlint herzog matt parker alias erikvon lint
> > > > > > > matt parker alias erikvanlunsenhout matt parker alias e von lindtherzog matt
parker alias tatyanadochenkova matt parker alias eric vanlinthout matt parker is a filthy
liar and libeler that manipulates the public opinion matt parker alias ws never submit a
real email address to trueloves.com matt parker alias sergi smith matt parker alias
ericvonlindthout hack the childporn site http:
> > > > > > > //tinyurl.com/4bb86 to pieces stay away from eurobrides.com
> > or be hacked and scammed matt parker alias eric van lindtherzog matt
> > parker alias evanlint hout matt parker alias erik von lunsen herzog
> > matt parker alias p crew matt parker alias ericvanlint hout matt
> > parker alias erikvonlindt matt parker alias erik van lunsen one of the
> > dismissed employees did not find a new job got into debts
> > > > > > > and was found in a noose matt parker alias e van lint the
> > mail worm forwards this message to every address book entry matt
> > parker alias e van lindt hout matt parker alias ericvanlindthout matt
> > parker alias erik vonlindt herzog matt parker alias elunsen his real
> > name is matthew s parker from cottage grove oregon and that is it
> > http://tinyurl.com/4c2t5 matt parker alias best day is now matt
> > > > > > > parker alias erikvan lint damn matt parker and let his
> soul burn in hell till it freezes over matt parker alias fquisinsky
> matt parker alias grootaap matt parker alias evonlindt hout matt
> parker alias kparker matt parker alias e vanlindt matt parker alias
> sergej smith matt parker alias evan lindt matt parker alias
> ericvanlunsen hout all personals at eurobrides.com are fake and the
> whole
> > > > > > > site sucks matt parker alias dshredder matt parker alias p
> > ure matt parker alias erik van lindt herzog do not believe any of the
> > lies matt parker posts in this forum matt parker alias bestday matt
> > parker alias evan lunsenhout matt parker alias taniadochenkova matt
> > parker was born on 09 13 65 matt parker alias supermachines matt
> > parker alias nad zaitz matt parker alias ag matt parker alias
> > > > > > > erikvan lindtherzog matt parker alias dchenka tatyana
> dchenka matt parker alias eric vanlindt matt parker alias evan lindt
> herzog matt parker alias eric vanlindtherzog matt parker alias
> tanyadchenka matt parker alias dq matt parker is the husband of anna
> parker from cottage grove oregon matt parker has friends all over the
> world whose joy in life is mutilating dissatisfied clients matt

> > > > > > > parker alias erik lunsen matt parker alias erik von
> > lintherzog matt parker is belgian about forty years old with dark hair
> > and lives in cottage grove oregon matt parker alias erik vanlindthout
> > matt parker alias evan lunsen herzog matt parker alias frank quisinsky
> > matt parker alias evanlinthout the date of birth of matt parker is
> > september 13 1965 matt parker alias erikvanlint herzog matt
> > > > > > > > parker alias tania dchenka matt parker alias ericvonlint
matt parker alias eric vonlinthout matt parker alias d shredder matt
parker alias ericlunsen the date of birth of matt parker is 13 9 1965
matt parker alias erik von lunsenherzog matt parker alias eric van
lunsenherzog matt parker alias ericvanlintherzog matt parker alias
ericlindt matt parker alias erikvon linthout matt parker
> > > > > > > alias sergeysmith matt parker alias eric von lunsenherzog
> matt parker alias e vonlindthout matt parker alias eric lunsen matt
> parker alias eric vanlunsenhout matt parker alias erikvon lint hout
> matt parker alias erikvan lunsen matt parker alias erik von lindthout
> matt parker alias e van lunsen hout matt parker alias erikvonlindt
> hout matt parker alias evanlunsenherzog matt parker alias
> > > > > > > erik vonlunsen herzog matt parker alias eric van
> lunsenhout damages will be claimed from matt parker to compensate
> financial loss matt parker alias erikvan lintherzog matt parker alias
> tatjana dchenka matt parker was born on 13 sep 1965 matt parker alias
> evan linthout matt parker alias ania parker earn money for every forum
> this statement is posted in the date of birth of matt parker is
> > > > > > > sep 13 1965 matt parker alias phro crew matt parker alias
> tatjanadchenka matt parker alias robert miller matt parker alias eric
> vanlint hout the only purpose of antiscam.org is to lead users to the
> commercial sites of matt parker all personals at trueloves.com are
> fake and the whole site sucks matt parker alias j jones matt parker
> commits online impersonation and harassment matt parker
> > > > > > > alias erik van lint hout matt parker alias tatiana
> > dochenkova matt parker alias eric vonlunsen hout matt parker alias
> > andy c matt parker alias e von lunsenherzog matt parker alias erik van
> > lindtherzog matt parker alias annaparker never enter a true credit
> > card number at trueloves.com matt parker alias r miller matt parker
> > alias eric van lindt herzog matt parker alias eric vanlindt herzog
> > > > > > > > matt parker alias ladiest matt parker blackmails clients by
> > coercing them to delete complaints from newsgroups matt parker alias n
> > zaitzeva matt parker alias ericvon lunsen matt parker alias
> > erikvanlindt hout matt parker alias e vanlint matt parker alias
> > ericlint matt parker alias eric von lint matt parker alias erik
> > vonlunsen matt parker alias e von lunsenhout matt parker alias erik
> > von
> > > > > > > > lint herzog matt parker alias tatjana dochenkova matt parker
> > is a gay masochist whose ass will be raped by gangs of fat black jail
> > bubbas matt parker alias erikvonlunsen matt parker alias eric van lint
> > hout this is hard evidence that matt parker spams the net with
> > childporn http://tinyurl.com/5h6rh matt parker alias e vonlunsen
> > herzog every deletion or refutation will automatically cause
> > > > > > > new occurrences of this statement matt parker alias eric

> vonlunsenherzog matt parker alias ericvan lunsen herzog matt parker
> alias erik vonlint hout matt parker alias sex-machine matt parker
> alias e vanlindt hout matt parker alias eric von lunsen herzog matt
> parker alias gerald jones matt parker alias tatyanadchenka members of
> trueloves.com have access to adult material depicting minors
> > > > > > > in sexual acts matt parker alias tanya dchenka matt parker
> alias t dchenka matt parker alias anjaparker matt parker alias eric
> von lunsen hout matt parker alias erik vonlindtherzog matt parker owns
> dating sites since their clients are unlikely to complain and admit
> their membership matt parker alias taniadchenka matt parker alias e
> vanlunsen hout matt parker alias eric von linthout matt
> > > > > > > parker alias ericvonlunsenhout stay away from
trueloves.com or be hacked and scammed matt parker alias best dayisnow
matt parker alias e vonlunsen matt parker alias e van lintherzog all
matt parker ever wanted to do was fuck scammer bitches anyway matt
parker alias e vonlint herzog matt parker alias e vonlindt matt parker
alias http://erikvanlint.com matt parker alias evon lindt matt
> > > > > > > parker alias ericvonlinthout matt parker alias tania
> > dochenkova in reality his name is matthew parker from cottage grove
> > oregon and that is that matt parker commits credit card fraud and
> > identity theft matt parker alias erikvon lunsen herzog matt parker
> > alias e von lindt matt parker alias ericvonlintherzog matt parker
> > alias groot aap matt parker alias erik van lintherzog matt parker
> > alias
> > > > > > > > eric lint matt parker alias eriklindt matt parker makes
> > false accusations to make others seem guilty of his criminal
> > activities matt parker alias e vanlindthout matt parker alias erik
> > vonlint matt parker alias eric von lindt herzog matt parker alias eric
> > van lunsen matt parker alias ericvonlunsen herzog matt parker alias
> > eric vanlindt hout matt parker alias sergey smith matt parker alias
> > > > > > > > e vonlintherzog matt parker alias erikvan lunsenherzog matt parker alias
ericvanlint herzog matt parker illicitly publishes personal data that he steals from hacked
mailboxes matt parker alias evonlindthout matt parker alias erikvon lunsenherzog anna
parker is a russian whore wanted by the russian police for prostitution matt parker
registers domains with the name of his clients to
> > > > > > > impersonate them matt parker alias evonlunsen hout matt
> parker alias e van linthout matt parker alias erikvanlindt herzog matt
> parker alias vvf matt parker alias erik vonlindt hout matt parker
> impersonates clients to make them seem guilty of his criminal
> activities matt parker alias ericvon lunsen hout matt parker alias e
> von linthout matt parker alias ericvonlunsen hout matt parker was
> > > > > > > born on 13 sep 65 matt parker alias eric van lindt matt
> > parker alias erik van lint herzog matt parker alias yda change country
> > of residence if personal data is captured by matt parker matt parker
> > alias ericvon lunsenhout matt parker alias ericvonlindt hout matt
> > parker alias eric vanlunsen hout matt parker alias matthew parker matt
> > parker alias geraldjones matt parker alias eric von lunsen
> > > > > > > matt parker alias evanlindtherzog matt parker alias erikvan lunsenhout this
is hard evidence that matt parker spams the net http://tinyurl.com/3htl2 matt parker alias
pure order a new identity at http://www.offshore-manual.com if personal data is captured by

matt parker matt parker alias e von lint matt parker alias evlh matt parker alias erikvan lunsen herzog matt parker alias eric
> > > > > > > vonlint herzog matt parker alias gjones matt parker alias evon lunsen hout

3334. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 10:24:52 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <414ABB74.1000406@gwi.net>
Source record: 89455

Thierry wrote:
> Thanks for all comments.
>
> I did a mistakle in my specs because they are no traps on the windom (I
> confused with W4DZZ).
>
> In fact I thought that both designs being wire antennas of almost the same
> length, they 'd display the same radiation pattern at a few percent.
> But I was focused on the shortest segment (1/3) of the windom and wonder
> whether it could cause or not additional problems or display drawbacks
> compared to a real dipole...
> In all case I will test it in 2 weeks.
> Problem with dipole3, the influence of a shorter segment is not taken into
> account. I don't know if that could be important, probably not much, but it
> 'd have been interesting to add some additional parameters like the length
> of each segment and the tilt of the tilt too to get a more accurate result.
>
> Addition:
> My believe is founded. I just find some radiation patterns and comments in
> the ARRL antenna book ch7-8. The windom is much more omnidirectional than a
> dipole. They say that "the system (windom) takes advantage of the asymmetry
> of the horizontal wires to induce current onto the braid of the vertical
> coax section.... The radiation pattern... tends to fill in the deep nulls
> that 'd be present ... if horizontally center fed".
> globally they consider that the windom give better results due to the
> omnidirectional pattern or so than a true dipole.
> Anyway, if I have the courage I will try to simulate the windom in Multinec.
>
>
> Thanks for the help
> Thierry, ON4SKY
>
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cicu62$6d3$1@sparta.btinternet.com...
>
>>Taking one band with another and one direction with another, the
>
> difference
>
>>between a Windom and G5RV will be entirely undetectable.
>>
>>They will both have somewhat poorer performance than a simple random
>

> length
>
>>dipole of about the same length and height fed over a random length, high
>>impedance, any Zo, open-wire line.
>>
>>Following the study you have given to the subject, you may be disappointed
>>at the responses to your question, But you did ask.
>>
>>And there's no reason why you should be deterred from experimenting with
>>either or both types of antenna. You will then be at least as wise as us
>>Old Wive's.
>>
>>If you should like playing with just a few numbers then amuse yourself
>
> with
>
>>small programs DIPOLE3 and ENDFEED. Download from website below in a few
>>seconds and run immediately. They provide lots of data but the most
>>important thing is the single number - radiating efficiency!
>>---
>>...
>>Regards from Reg, G4FGQ
>>For Free Radio Design Software go to
>>http://www.btinternet.com/~g4fgq.regp
>>...
>>
>>
>
>
>
Hi Thierry:

The only draw back of the off center fed dipole is the possibility of introducing radiation from the feedline which can make for R.F. in the Shack if not properly acconted for , it also makes predicting the radiation pattern a little skewed to the long end of the dipole. I Use two off center fed dipoles (miss nomer windoms) here one is cut for 40m long the other 20m long the 40m long one is fed with a 4:1 balun and 75 ohm coax the 20m long is fed with 300 ohm open wire line to a tuner. both antennas do a good job for me. I do mostly causual dxing (but as one poster has already said you'll have to decide which propagation mode you are seeking if grayline put up a vertical or other lowangle radiator for 80meters.) They are mounted at 90 degrees to each other. I've been able to work lots of dx on these antennas .. I had two g5rv's up prior to these and from a pure operational veiw point find them a little better at my location.

hope this is of some help.
73 Dave

3335. Re: Newbie question about FM aerial and portable radio

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 10:57:52 UTC
From: Ger <gerdalt999@hotmail.com>
Message-ID: <Poz2d.28184$Z14.9722@news.indigo.ie>
Source record: 89456

"Howard" <mensch90249@yahoo.com> wrote in message
news:im29k0dg1k0l9kmsbepgodvapktqlom9gv@4ax.com...
> On Sun, 12 Sep 2004 18:24:05 +0100, "Ger" <gerdalt999@hotmail.com>
> wrote:
>
> >
> >"Doc" <ltdoc@yahoo.com> wrote in message
> >news:imW0d.73$tu2.8757@sooner.brightok.net...
> >> Ger,
> >> You should be able to add an external antenna to your new radio
> >> but don't expect 'perfect' reception of other than local stations. I'm
> >> afraid reception would never be as good as on the 'cable', but that
> >> doesn't mean it won't/can't be pretty good. A 'closed circuit' system
> >> like the cable will always be 'better' than broadcast reception.
> >> 'Doc
> >>
> >>
> >Thanks Doc, but don't you miss my point?
> >I *don't* want to use an external antenna - I want to use the co-ax cable
> >input.
> >There are channels on the cable which I can never receive with an
external
> >aerial.
> >Ger
> >
> Ger,
> If you don't mind some disassembly & soldering there is a good way to
> deal with this. I did this 'mod' to a friends portable stereo so he
> could use a coax-fed external antenna at his cabin. You'll need a
> bulkhead F connector (available at Ratshack) and a small stretch
> RG-174 coax (you could just use 'plain wire' if you don't have some of
> the coax laying around), a drill and a soldering iron. Open the radio
> and find where the whip connects to the circuit board - typically
> there is a short stretch of hookup wire from the whip to the board.
> Then unsolder the hookup wire from the board. Next, find an open area
> on the radio cabinet and drill a hole & mount the bulkhead F
> connector. Strip each end of the coax and solder the center conductor
> where you unsoldered the whip, then solder the shield/braid to a
> ground trace on the board. At the other end of the coax solder the
> center conductor to the center pin and the shield/braid to the 'shell'
> side of the connector. Reassemble and your'e done. If you want to
> get fancy, you can also install a switch so you can choose between the
> whip and an external antenna.
>

> Hope this is helpful,
> Howard

Howard, that's just great - many, many thanks.

Ger

3336. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 11:20:22 UTC
From: **********
Message-ID: <e1ilk05olvfrjf7hs7p2nc26c7k6p22i91@4ax.com>
Source record: 89457

On Wed, 15 Sep 2004 11:08:21 +0200, Toni <post_to_usenet@hotmail.com>
wrote:

>Hi,
>
>I have a Sony radio for SWL and I have seen that if I parallel a
>300 ohm resistor to the antenna input the received signal drops
>considerably [1]. I think this means the receiver's input
>impedance is much greater than the normal 50/75 ohms. This makes
>me wonder two things:
>
>- How can I measure the approximate value of the receivers input
>Z?

Normally done with a noise bridge.

Am scratching my head what to do, if there is no noise bridge....

w.

3337. Re: Msg for Reg, G4FGQ

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 11:46:57 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10kljmfe0k7t626@corp.supernews.com>
Source record: 89458

"Walter Maxwell" <w2du@iag.net> wrote in message
news:jbhjk095k9qjs327hfbn4ucam8nugcni89@4ax.com...
> On Tue, 14 Sep 2004 22:48:04 +0000 (UTC), "Reg Edwards"
> <g4fgq.regp@ZZZbtinternet.com> wrote:
>
> >I'll allow a wine-assisted imagination to wander around my own history.
> >
> >I came across Gibbs around 1948 by accident while searching for more
> >information on transmission lines in general. Google had not been
invented.
> >He appears to have made his name known (no doubt also in other matters)
> >because of his "Gibb's Phenomenon", an overshoot of some kind in an
> >extension of Fourier's Waveform Analysis. At the time I had no interest
in
> >'overshoots' and forgot all about it. My ignorance about Gibb's other
work
> >has continued ever since. I appologise for no mention of his name in
> >connection with tidying up Maxwell's work. And there's no reason at all
to
> >resurect the Boston Tea Party.
> >
> >Heaviside died in solitude in 1925. I was born during a freezing 6-feet
> >deep snow-storm 9 months later. I sometimes like to think there is a
> >spiritual connection.
> >
> >Mother was a little hard-working woman who took in laundry and
> >clothes-ironing from the slightly better-off classes. Father was a
> >30-shillings a week iron-bolt header but the national General Strike was
> >imminent. In his spare time he taught himself to drill holes in ebonite
> >panels using a red-hot poker the smell of which began my technical
> >education. But he could solve quadratic equations in his head without
the
> >use of pencil and paper or any knowledge of algebraic symbols. I never
> >understood how he did it. Although he lived to the age of 90 he could
never
> >explain it himself.
> >
> ><snip>
> >
> >Around 1951, as a sideline with other duties, while working in the
> >Engineer-in-Chief's Office of the British Post Office, I first became
> >involved with the location of faults on transmission lines. Then, for a
> >period, I specialised in faults on the then new deep-sea coaxial cables
with

> >submerged valve-type repeaters (amplifiers). Transistors were not good or
> >reliable enough.
> >
> >I worked alone but with the facilities of a shared workshop and staff. My
> >boss was an ex-cable ship Cable Testing Officer, a Ph.D, I think next to
the
> >captain in rank, who always said the only doctor in his family was his
> >brother, a doctor of medicine. His name was Bray and he had the
knickname,
> >when not in his company, of "The Vicar".
> >
> ><snip>
> >
> >I became involved with reflection coefficients, etc., in the frequency
range
> >0.1Hz up to HF using rectangular-waves and sinewaves. The Dollis Hill,
> >Research Depapartment laboratories (the PO Bell-Labs) made me a 0.1 to
100
> >Hz, balanced-and-screened output transformer, to be used in a power
> >amplifier, a test signal generator. The amount of 10-thou, mu-metal used
in
> >it necessitated a special order being placed on the lamination
manufacturer.
> >
> >I had to make my own precision 0-to-11.111 microfarad, 5-dial, variable
> >capacitor entirely out of specially made polyethylene-dielectric
metal-cased
> >capacitors. Absorption with all other dielectrics was far too high at
0.1Hz
> >to make accurate impedance bridge measurements. Mica was awful!
> >
> >Incidentally, apart from research work, the only occasion this capacitor
was
> >used for a practical purpose was to locate a fault on a land cable when I
> >was in Sweden. The embarrassed Swedish engineers were not aware the fault
> >existed. Needless to say I promised aboard the ship on my departure not
to
> >include the incident in my report. And I didn't. The Vicar, with his
cruel
> >sense of humour, was not altogether happy but for technical political
> >purposes I had him by the balls. He was really a kind fellow and before
> >retirement he ended up as Head of the PO Engineering Training College.
> >
> >Some years later I had the idea of donating the transformer and capacitor
to
> >the Science Museum in London. But some other equally sentimental
collector
> >had already stolen them. I sometimes wonder (2004) where they are now.
> >
> ><snip>

> >
> >But this is a long way from the much neglected Heaviside.
> >
> >During the course of my fault location research I ran into a mental
> >blockage. Ultimately, I had to translate the appearance of the reflected
> >waves, as appeared on a 10 second persistance cathode ray tube, a
function
> >of time, into miles from one end of the cable. That is all the ship's
> >captain needs to know before he can leave port and set a course. He can
then
> >retire to his lonely cabin with a bottle of duty-free scotch if he should
so
> >wish.
> >
> >Eventually I discovered Heaviside's Operational Calculus. Lo and behold,
> >winding the handle on a German mechanical calculating machine, there
> >appeared on a sheet of graph paper the same shaped curves as on the
> >long-persistence CRT. The fault locating equipment was eventually
installed
> >at oceanic terminal stations. I had the oportunity to use it on the first
> >breakdown to occur on the relatively short Middlesborough-Gothenburg
cable
> >which, as usual, was due to an unknown fishing trawler in the north sea.
> >
> >All the learned arguments on this newsgroup about SWR, the various
> >reflections and virtual this that and the other, occur because time is
> >ignored. It is admitted time does complicate matters. But Heaviside
sorted
> >transient matters out, versus time, many moons ago.
> >---
> >Reg.
> >
> Reg, your 'wine assisted imagination wandering around your own history'
gave me
> a marvelous insight into you as a person. I'm delighted to know of the
exacting
> and profound activities you have experinced. As I said earlier that
telling of
> yourself is not bragging. I find that the more one knows about a person
the more
> or less respect one has for him. In your case it is indeed much more.
>
> Thank you for that marvelou insight.
>
> Walt

Reg
That was one of the better reads I've had.
Thanks
73

H.

3338. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 13:35:28 UTC
From: Thierry <http>
Message-ID: <414ae831$1@news.vo.lu>
Source record: 89459

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:414a4deb$1_4@corp.newsgroups.com...
> Walter Maxwell wrote:
> > If I may put in my two-cents worth, a dipole is a dipole. The G5RV is a
dipole
> > and the Caroling Windom is a dipole.
>
> Hi Walt, I don't know if you know or not, but the Carolina Windom
> is designed for the vertical section to radiate so it has a
> radiation pattern which is a combination of a dipole and a vertical.

Indeed, all the interest of the thing..., hence my question.
But I wonder also about the QRM pick-up along this vertical segment...
I will have the answer in two weeks.

Thierry, ON4SKY

> --
> 73, Cecil, W5DXP
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3339. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 13:41:14 UTC
From: Thierry <http>
Message-ID: <414ae98b$1@news.vo.lu>
Source record: 89460

"KC1DI" <elbc2@gwi.net> wrote in message news:414ABB74.1000406@gwi.net...
> Thierry wrote:
> > Thanks for all comments.
>...
I Use
> two off center fed dipoles (miss nomer windoms) here one is cut for 40m
> long the other 20m long the 40m long one is fed with a 4:1 balun and 75
> ohm coax the 20m long is fed with 300 ohm open wire line to a tuner.
> both antennas do a good job for me. I do mostly causual dxing (but as
> one poster has already said you'll have to decide which propagation mode
> you are seeking if grayline put up a vertical or other lowangle radiator
> for 80meters.) They are mounted at 90 degrees to each other. I've been
> able to work lots of dx on these antennas .. I had two g5rv's up prior
> to these and from a pure operational veiw point find them a little
> better at my location.

For sure the location add a bias factor, soil, rock, sand, trees, etc affect
the radiation pattern, all the more that on my Windom the coax segment will
be at 50% in trees... although the ladder line of my G5RV was in the air,
off trees...
Anyway, I will have the confirmation in a few weeks.
If results are "unattended" I will post a new msg.

73
Thierry, ON4SKY

>
> hope this is of some help.
> 73 Dave

3340. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 13:57:02 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cieqfe$pe7$1@hercules.btinternet.com>
Source record: 89461

The distortion in S-meter scale-shape at very small signal levels, below about S5, could be corrected very easily just by changing scale markings. The meter scale would then end at about S2 instead of S-zero. And the meter would indicate correctly as a wattmeter over the whole length of its scale.

But S-meter manufacturers are reluctant to do this. They consider it would spoil the linear appearance of the scale at the low end and so lose customers. How foolish they are!

Keen radio amateurs can change their S-meters into accurate instruments over the whole scale just by scraping off existing scale markings and re-calibrating with a fine-nibbed pen and black indian ink.

But on second thoughts, to save yourself the trouble, when using the meter it's even easier just to visualise and remember where S3 should be marked on the meter scale.

Reg, G4FGQ

3341. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 14:35:25 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <btidnSrhP6GGa9fcRVn-vQ@comcast.com>
Source record: 89462

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:4qgkk097s5kef14ih25uh4tu2h9lt66cds@4ax.com...
> On Thu, 16 Sep 2004 21:26:48 -0400, "Tam/WB2TT"
> <t-tammaru@c0mca$t.net> wrote:
>
>>To make a long story short, the resistor error will be about 20% where the
>>Megahertz x MegaOhms = 1.
>
> And not so curiously Trc = 1 MOhm • 1 pF = 10^-6

I think the curve ignores C, and is based on skin effect only. There is no explanation for the data.

> F = 1 / T
> F = 1 MHz
> perhaps the product rule should be:
> Megahertz x MegaOhms x picoFarads = 1

Go to http://www.xicon-passive.com/resistor.html and click on CC. There is also info on resistor performance vs frequency in the W6SAI book. He shows curves for 5 different carbon resistors vs frequency without identifying the resistor values. As a gross average, they show about 50% error at 15 MHz.
>
> The 20% error is, of course, simply the rolloff response at the RC
> inflection point described by 1/Trc.
>

The curve goes from 0 - 100. I arbitrarily picked 20 % as being a point where there is apreciable error.

Tam/WB2TT

>>Let's see if anybody
>>shoots this down.
>
> Hi All,
>
> I think chipping at the clay feet of saints is more appropriate
> metaphor.
>
> What is the saint? The RF response of the resistor. It should be
> suspect right out the gate. Being suspect, you employ the
> conventional techniques already evidenced even by the cheapest Power
> Meter builder (MJF) by swamping the stray capacitance with series
> capacitors (paralleling the resistors). One capacitor is either
> variable, or further paralleled with a trimmer. The saint is also the

> unspecified requirement: is this divider BEFORE OR AFTER the detector?
>
> If before, and thus subject to RF, the simple RC compensated divider
> has served for eons. If after, and thus subject to only DC - who
> cares? The one clay foot of the discussion.
>
> The other clay foot of the discussion is that for placement before OR
> after the detector, ALL ratios are post-hoc determinations (in other
> words, design with variable components fully expecting you WILL be
> wrong).

So true. I notice the series C in the Kenwood meter is variable.

> Further, ALL descriptions to this point have been of
> normalized levels. With the RC compensated divider, you are throwing
> the knee if rolloff into lower frequencies so that ALL frequencies of
> interest reside on the same slope. Hence the common "calibration"
> procedure has you adjust the resistors for the low frequency readout,
> and the capacitors at the high frequency readout. This "calibration"
> is simply distributing the error so that it doesn't accumulate
> outrageously.
>
> The greater challenge is how do you know how much power you are
> setting your meter to read? Compounding errors are common in RF.
>
> 73's
> Richard Clark, KB7QHC

3342. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 14:51:35 UTC
From: dmr <dmr-md31@hotmail.com>
Message-ID: <m6ulk05mq6r25e3ijq8dp672kljv7i6l76@4ax.com>
Source record: 89463

I have used 160M Carolina windoms for the past 5 years or so and have found them to be really good performers. The higher you can get the vertical element off the ground the better (I have had good results with it only 20' off the gorund....Radioworks recommends more). I have never modeled it, nor had experience with G5RV, but compared to a half wave dipole at similar height, my "impression" is that it performs at least as well, probably better, plus multiband. Beward you will need to use a tuner with it, and if you are running legal limit, be careful of your SWR's as you can burn out the balun or RF choke (they are not traps). There has been a lot of debate about this antenna, but I can tell you the 160M version works quite well on all bandsl.
GL es 73
Dan (k0dan)

On Fri, 17 Sep 2004 15:35:28 +0200, "Thierry"
<http://www.astrosurf.com/lombry> wrote:

>
>"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>news:414a4deb$1_4@corp.newsgroups.com...
>> Walter Maxwell wrote:
>> > If I may put in my two-cents worth, a dipole is a dipole. The G5RV is a
>dipole
>> > and the Caroling Windom is a dipole.
>>
>> Hi Walt, I don't know if you know or not, but the Carolina Windom
>> is designed for the vertical section to radiate so it has a
>> radiation pattern which is a combination of a dipole and a vertical.
>
>
>Indeed, all the interest of the thing..., hence my question.
>But I wonder also about the QRM pick-up along this vertical segment...
>I will have the answer in two weeks.
>
>Thierry, ON4SKY
>
>> --
>> 73, Cecil, W5DXP
>>
>>
>> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----
>

3343. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 14:57:47 UTC
From: dmr <dmr-md31@hotmail.com>
Message-ID: <2iulk0d0k7n63da9p9298ufo08ttbjcdq3@4ax.com>
Source record: 89464

The original windom of the 1920's had a single wire (vertical)
feedline. The Carolina Windom as sold by Radioworks has RF radiation
from the feedline which is a deliberate design consideration of this
antenna; it has a vertical element (the piece of coax hanging off the
balun) which is designed to radiate,. and which creates the low angle
lobes. The RF radiation is STOPPED at the RF choke which is at the end
of the "feedline". Then YOU feedline connects here and essentially
does not radiate.

There is alot of information on this antenna at
http://www.radioworks.com/, some of which contradicts some of the
mythology which appears in the NG's and reflectors..
73
Dan (k0dan)

>>
>Hi Thierry:
>
>The only draw back of the off center fed dipole is the possibility of
>introducing radiation from the feedline which can make for R.F. in the
>Shack if not properly acconted for , it also makes predicting the
>radiation pattern a little skewed to the long end of the dipole. I Use
>two off center fed dipoles (miss nomer windoms) here one is cut for 40m
>long the other 20m long the 40m long one is fed with a 4:1 balun and 75
>ohm coax the 20m long is fed with 300 ohm open wire line to a tuner.
>both antennas do a good job for me. I do mostly causual dxing (but as
>one poster has already said you'll have to decide which propagation mode
>you are seeking if grayline put up a vertical or other lowangle radiator
>for 80meters.) They are mounted at 90 degrees to each other. I've been
>able to work lots of dx on these antennas .. I had two g5rv's up prior
>to these and from a pure operational veiw point find them a little
>better at my location.
>
>hope this is of some help.
>73 Dave

3344. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 15:04:43 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <f2D2d.4492$mb6.2176@newsread3.news.atl.earthlink.net>
Source record: 89465

> Indeed, all the interest of the thing..., hence my question.
> But I wonder also about the QRM pick-up along this vertical segment...
> I will have the answer in two weeks.
>
> Thierry, ON4SKY

Why would QRM be a problem ? The beter the antenna the more signal it will pick up. Maybe you ment QRN (noise) instead of M (undesired radio signals) ?

3345. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 15:22:05 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cievjn$p8a$1@newshost.mot.com>
Source record: 89466

Nice tutorial, Reg I printed it out for ref.

...however.
The 2M rigs I've measured (3) are WAY off. The +20 +40 and +6o are usually also around 6dB plus or minus 3 or 4 dB. I measured my TS-830s and it was not very close, and my 706, but don't recall the results and haven't done the TS 2000 yet.

73, Steve K9DCI

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message news:cicr9q$25b$1@sparta.btinternet.com...
> At HF it's all very simple.
>
> To summarise -
>
> The S-meter is essentially a 50-ohm power or wattmeter.
>
> It is correctly calibrated with a 50-ohm signal generator with its
> open-circuit volts set to 100 microvolts. The S-meter should then read S9.
>
> Therefore, at the standard S9, the input to the receiver is 50 microvolts
> across 50 ohms, corresponding to a power input of 50 picowatts.
>
> The standard S-unit = 6 dB.
>
> So for each change of one S-unit the input voltage halves (or doubles).
>
> At S-zero the input voltage is 50/512 = 0.1 microvolts, which is roughly
> equal to the the internal noise level of a good receiver with a bandwidth of
> a few KHz.. Theoretically this is about the noise level you should get when
> the antenna is disconnected.
>
> At S9 + 40dB the input voltage is 50*100 microvolts = 5 millivolts.
>
> Some S-meters may indicate as high as S9 + 60dB. The input voltage is then
> 50 millivolts which is about the overload point of a very good receiver.
>
> So the whole scale is calibrated logarithmically, with S9 being about
> half-way along it, and with 54 dB below S9 and 40 or 60dB above S9. The
> input voltage range is from from 0.1 microvolts to 5 or 50 millivolts.
>

> ==============================
>
> However, all meters have indicating errors. The problem arises because of
> the difficulties and great expense in designing and manufacturing
receivers
> with an agc meter system which can accommodate a signal level range of 54
+
> 60 = 114 dB. Economics invariably rules the roost.
>
> (It helps to have very high receiver gain and attenuators at or near the
> receiver input.)
>
> Fortunately modern receivers all tend to have errors of the same sort and
> sign. So amateurs using different manufacturer's receivers will exhange
very
> similar signal strength reports.
>
> These errors congregate at the very small signal end of the range. Meter
> calibration begins to go wrong at around or below S4 or S5. Meter readings
> of, say, S1 or S2 may actually be appropriate to power levels of S3 or S4.
> A meter reading of S-zero may be appropriate to a power level of S2 or S3.
>
> That is, at very small signal levels the S-meter underestimates signal
power
> level. But it's not of great consequence. At HF, to which the foregoing
> applies, signals are usually below the noise and QRM levels anyway.
> ---
> Reg.
>
>

3346. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 15:24:27 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cievo5$p8n$1@newshost.mot.com>
Source record: 89467

Oh, yea! I forgot the bit about Peak...silly me.
73, Steve K9DCI

"JGBOYLES" <jgboyles@aol.com> wrote in message
news:20040915171745.09431.00000812@mb-m05.aol.com...
> >E = Root (P*R)
> >
> >Scaled V is V / 273 but you'll have to go further to stay in the
dynamic
> >range of the multiplier. V^2 should be around 10V or whatever the mult
can
> >output.
>
> Thanks for checking my calcs. Steve. I had to do what your spreadsheet
did by
> hand. I should note that since I have to convert the voltage to the
multiplier
> to DC, at 1500 watts we are working with 273*SQRT 2 or 386 volts. I size
the
> divider so that 386 this gives 10.0 volts to the multiplier. With a
dual
> polarity 15VDC supply, the multiplier has enough dynamic range.
> 73 Gary N4AST

3347. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 15:32:02 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cif06b$p9v$1@newshost.mot.com>
Source record: 89468

Sheeesh ! "Fourier Analysis of the universe". Now that's HEAVY!

I'll take a pass...
Steve

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cicvuv$ft9$1@hercules.btinternet.com...
> Anything which repeats itself is amenable to Fourier Analysis.
>
> If there's a once-only event then Heaviside's Operational Calculus is
> appropriate.
>
> It's not more difficult. It's just a matter of getting used to it.
>
> ================================
>
> "Richard Harrison" wrote -
> Cecil, W5DXP wrote:
> > "You don`t really think that our present Big Bang was the first one
> > ever, do you?"
>
>

3348. Re: dBW in S-unit and power strenght

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 16:30:55 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <3jE2d.4551$mb6.170@newsread3.news.atl.earthlink.net>
Source record: 89469

"Steve Nosko" <suteuve.nosukowicuz@moutouroula.com> wrote in message
news:cievjn$p8a$1@newshost.mot.com...
> Nice tutorial, Reg I printed it out for ref.
>
> ...however.
> The 2M rigs I've measured (3) are WAY off. The +20 +40 and +6o are
usually
> also around 6dB plus or minus 3 or 4 dB. I measured my TS-830s and it was
> not very close, and my 706, but don't recall the results and haven't done
> the TS 2000 yet.
>
> 73, Steve K9DCI
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cicr9q$25b$1@sparta.btinternet.com...
> > At HF it's all very simple.
> >
> > To summarise -
> >
> > The S-meter is essentially a 50-ohm power or wattmeter.
> >
> > It is correctly calibrated with a 50-ohm signal generator with its
> > open-circuit volts set to 100 microvolts. The S-meter should then read
> S9.
> >

While I will not debate or dispute the origional S-meter meanings, I would have to say there is almost no rig that follows that calibration. I have measured a few low band rigs and several vhf/uhf rigs. The low band units seem to be somewhat more 'calibrated' than the VHF and above rigs but most are usually way off. From my observations and the write ups in QST the S-meter and the 50 uV and all the 6 db per S-unit should not even be spoken of .

We need to kill the idea of the s-unit being 6 db or anything at all. They are just numbers on an uncalibrated meter on most receivers. You might just as well mark the meter from 0 to 100 and go by whatever number the meter is showing. The meters are not linear, log, or any combination that can be depended on from one brand to another brand. Even changing bands on the same receiver will usually change the 'calibration' of the s-meter.

3349. Clemens match modelling

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 16:59:58 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <bWQjflCOgxSBFw8I@b-howie.demon.co.uk>
Source record: 89470

Hi,

I've been trying to model the Clemens match (it's a sort of off-set gamma match) on NEC (specifically 4NEC2 and NEC2D). I find that the addition of this reduces the calculated antenna gain by about 2dB. If I model it using MMANA, the gain is unaffected, which is what I expect, Has anyone had any experience of modelling this sort of match ?

73 Brian GM4DIJ
--
Brian Howie

3350. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 18:39:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ff7mk0thlcoub8gd45b5i9600or9vt8qqn@4ax.com>
Source record: 89371

On Fri, 17 Sep 2004 10:35:25 -0400, "Tam/WB2TT"
<t-tammaru@c0mca$t.net> wrote:
>I think the curve ignores C, and is based on skin effect only. There is no
>explanation for the data.

Skin effect would tend to increase resistance which contradicts the
trend. As for explanation:

From "Electronic Components and Measurements," Wedlock and Roberge,
1969:
"At high frequencies the performance of a resistor will depart
from Ohm's law because of stray capacitance and lead inductance."
[pg. 77]
There is an identical curve to your reference shown in Figure 7.4,
same page:
"Change in resistance of a ï¿½ Watt carbon-composition resistor as a
function of frequency. Frequency in MHz times resistance in
Megohms"
In Chapter 18 "RF Impedance Measurements":
"Such behavior is often termed stray capacitance or stray
inductance. Because these effects are usually undesirable and
serve to limit the high frequency performance of components, they
are also called parasitic effects." [pg. 276]

However, my expression of this being rolloff was too simplistic as the
curve does not follow the typical 10dB/Decade characteristic. Rather,
it shows a 6dB/Decade+. Some of this may be accounted for in lead
reactance, but at the Megohm scale this is inconsequential for
conventional leads.

73's
Richard Clark, KB7QHC

3351. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 18:41:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9pbmk01jucj18sls4dsnkrd6np59cihupe@4ax.com>
Source record: 89372

On Fri, 17 Sep 2004 13:20:22 +0200, ********** wrote:

>Normally done with a noise bridge.
>
>Am scratching my head what to do, if there is no noise bridge....

Build one: 4 resistors, Zener diode, battery.

3352. Re: Clemens match modelling

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 18:47:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10kmca1r2mfdmeb@corp.supernews.com>
Source record: 89373

Gamma-type matches consist of a small loop containing a source. This type of geometry can be a problem for NEC, and often produces the symptom you describe. You should have the progam report the average gain (see the NEC documentation on the RP "card"), and use it to correct the gain, unless you can rearrange the loop to get the average gain close to 1. MININEC-based programs don't have this problem with small loops -- they have other problems instead.

EZNEC users will see the average gain reported at the bottom of the main window after every 3D calculation, and its meaning and use described in the manual. However, note that EZNEC normalizes the correct average gain to a standard value of 1 with or without ground, while NEC will report a value of 0.5 (or 2, I don't recall for certain) when everything is ok but a ground is present.

Roy Lewallen, W7EL

Brian Howie wrote:
> Hi,
>
> I've been trying to model the Clemens match (it's a sort of off-set
> gamma match) on NEC (specifically 4NEC2 and NEC2D). I find that the
> addition of this reduces the calculated antenna gain by about 2dB. If I
> model it using MMANA, the gain is unaffected, which is what I expect,
> Has anyone had any experience of modelling this sort of match ?
>
> 73 Brian GM4DIJ

3353. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 20:29:27 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409171229.4aacfb07@posting.google.com>
Source record: 89374

"Thierry" <http://www.astrosurf.com/lombry> wrote in message news:<414a29cf@news.vo.lu>...
> Ok Mark, for sure for DXing a dipole or a windom is not a beam...

I'd rather have the coax fed dipole over the windom any day though...I
bet many people would think it's a beam , the way it will most likely
trounce the average windom.
I tried one "windom" at a field day against a coax fed dipole. The
dipole won by 2 s units in any direction. Thats about what you would
see going from a coax dipole to an average beam...:/ Or by changing
from 100w to 500w-1 KW...

>
> My objective is Dxing first as for local QSOs this is not a problem to get
> S9+.

If it's working local, why would it not be working dx ok? Why the
change to an antenna which basically will be the same, assuming
element lengths are fairly close for a given band, barring any changes
in feedline efficiency? IE: I assume you are going to switch from a
G5RV to a windom....
Thinking about either one of those antennas makes me want to take up
golf...
I don't like either one. It's no secret though....:(
The only thing the G5RV has going for it, is it is nearly a EDZ on
20m. But it's a reduced efficiency version compared to one fed in a
normal manner...
Coax to a choke to ladder line as a feedline is no way to live for a
serious dx'er who wants most of his power to actually be radiated by
the antenna element...The windom is not much better in this
regard....Or at least the ones I've seen.

> I know very well that DX performances will be more than limited, all the
> more in SSB, but this is a temporary solution waiting for a small beam 3-or
> 4 ele.

You still don't mention which band/s though... There are fairly simple
wire antennas much better for dx than the usual all band compromise
wire antenna. IE: extended double zepps, phased parallel dipoles, etc,
etc. I would use something along those lines if I wanted to dx say 20m
or up...If you want to dx 80/40, you might consider a bobtail curtain
or variant, or a good vertical. Trying to increase the dx potential by
changing from one semi lame antenna , to another semi lame antenna
strikes me as counterproductive. But, it's your yard and $$$.... :/
MK

3354. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 20:36:21 UTC
From: jgboyles@aol.com
Message-ID: <20040917163621.19211.00001082@mb-m03.aol.com>
Source record: 89375

>The other clay foot of the discussion is that for placement before OR
>after the detector, ALL ratios are post-hoc determinations (in other
>words, design with variable components fully expecting you WILL be
>wrong). Further, ALL descriptions to this point have been of normalized
levels.

Hi Richard, I haven't been able to keep up with this like I wished because of
that pesky Hurricane. If you put the detector circuit before the voltage
divider, then the resistors see DC which they are a lot happier with. The
detector diode will have to be 700VDC PRV rating, and the filter cap. will have
to be sized properly.
I guess the diode will have some frequency dependent properties, but as long
as it still acts like a diode, and the forward bias drop is around .6V it ought
to work. This looks like good alternative to frequency dependent resistors.
What say you?

73 Gary N4AST

3355. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 21:25:56 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cifktvsgh1@newshost.mot.com>
Source record: 89376

FYI
I have used either 470 or 510 ohm carbon comp resistors way back when as 20dB probes for a sampling scope and Spectrum analyzer work. If I recall, they were quite comparable to the scope's regular probes for pretty fast digital signals.
I would, however, get nervous with the high values stated / needed here. At first I was thinking I'd series-up 500 or 1K resistors if I had to do this, but then strays start to become significant as has been well discussed.

If you have the equipment, I like the frequency response / sweep idea. This way you may even be able to adjust the compensating caps for best high freq (10M) response. You could also use the calibrator on most good scopes to start out....
73,

--
Steve N, K,9;d, c. i My email has no u's.

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ff7mk0thlcoub8gd45b5i9600or9vt8qqn@4ax.com...
> On Fri, 17 Sep 2004 10:35:25 -0400, "Tam/WB2TT"
> <t-tammaru@c0mca$t.net> wrote:
> >I think the curve ignores C, and is based on skin effect only. There is
no
> >explanation for the data.
>
> Skin effect would tend to increase resistance which contradicts the
> trend. As for explanation:
>
> From "Electronic Components and Measurements," Wedlock and Roberge,
> 1969:
> "At high frequencies the performance of a resistor will depart
> from Ohm's law because of stray capacitance and lead inductance."
> [pg. 77]
> There is an identical curve to your reference shown in Figure 7.4,
> same page:
> "Change in resistance of a ¼ Watt carbon-composition resistor as a
> function of frequency. Frequency in MHz times resistance in
> Megohms"
> In Chapter 18 "RF Impedance Measurements":
> "Such behavior is often termed stray capacitance or stray
> inductance. Because these effects are usually undesirable and
> serve to limit the high frequency performance of components, they

> are also called parasitic effects." [pg. 276]
>
> However, my expression of this being rolloff was too simplistic as the
> curve does not follow the typical 10dB/Decade characteristic. Rather,
> it shows a 6dB/Decade+. Some of this may be accounted for in lead
> reactance, but at the Megohm scale this is inconsequential for
> conventional leads.
>
> 73's
> Richard Clark, KB7QHC

3356. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 22:08:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a7mmk0hb2focq1bd48umi2lksv2512r363@4ax.com>
Source record: 89377

On 17 Sep 2004 20:36:21 GMT, jgboyles@aol.com (JGBOYLES) wrote:

>What say you?

Hi Gary,

For a diode, the 1N4007 is rated at 1000V. However, you have to design with Peak voltage in mind, and then add 50% safety factor for good design. Further, feeding a capacitive filter requires you DOUBLE the PIV rating. All in all, this suggests your design choice should tend toward the divider before the detector. Then the question becomes, do you want a peak reading meter, or an averaging meter? A peak reading detector (AKA Clamp) will lightly load the divider whereas the averaging will load it more (and ruin any fixed divider ratio - which returns us to the variable component to be designed in).

73's
Richard Clark, KB7QHC

3357. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 22:18:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0domk0tk6egjqrcrb3qvnfgeclk5s957fb@4ax.com>
Source record: 89378

On Fri, 17 Sep 2004 16:25:56 -0500, "Steve Nosko"
<suteuve.nosukowicuz@moutouroula.com> wrote:

>At first I was thinking I'd series-up 500 or 1K resistors if I had to do
>this, but then strays start to become significant as has been well
>discussed.

Hi Steve,

This would probably improve the parasitic capacitance while increasing
the parasitic inductance. Off hand, I think the inductance would
probably be tolerable in the HF.

73's
Richard Clark, KB7QHC

3358. Re: Wattmeter Location

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-17 22:23:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10kmov3irkii254@corp.supernews.com>
Source record: 89379

A 1N4007 or any other silicon power diode is a poor choice as a
detector, for several reasons. The first is the large shunt capacitance.
The second is the long reverse recovery time, which makes silicon power
diodes look like a resistor rather than a rectifier at HF. High voltage
diodes like the 1N4006 and 1N4007 contain an intrinsic layer to increase
the voltage breakdown. This dramatically increases the reverse recovery
time to the point that they can be used as PIN diodes at HF.

Schottky diodes don't have the reverse recovery problem, but power
diodes still have a lot of capacitance (and reverse leakage current).

Only a signal diode should be used as an HF detector. If you can't find
one with a sufficient reverse voltage rating, you'll have to use a
divider of some sort.

Roy Lewallen, W7EL

Richard Clark wrote:
> On 17 Sep 2004 20:36:21 GMT, jgboyles@aol.com (JGBOYLES) wrote:
>
>
>>What say you?
>
>
> Hi Gary,
>
> For a diode, the 1N4007 is rated at 1000V. However, you have to
> design with Peak voltage in mind, and then add 50% safety factor for
> good design. Further, feeding a capacitive filter requires you DOUBLE
> the PIV rating. All in all, this suggests your design choice should
> tend toward the divider before the detector. Then the question
> becomes, do you want a peak reading meter, or an averaging meter? A
> peak reading detector (AKA Clamp) will lightly load the divider
> whereas the averaging will load it more (and ruin any fixed divider
> ratio - which returns us to the variable component to be designed in).
>
> 73's
> Richard Clark, KB7QHC

3359. Re: Where to locate low pass filters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 01:09:45 UTC
From: k9sqg@aol.com
Message-ID: <20040917210945.15036.00003538@mb-m02.aol.com>
Source record: 89380

The best place is at the output of the transmitter or linear amplifier.

3360. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 09:51:18 UTC
From: Thierry <http>
Message-ID: <414c052a$1@news.vo.lu>
Source record: 89381

"dmr" <dmr-md31@hotmail.com> wrote in message
news:m6ulk05mq6r25e3ijq8dp672kljv7i6l76@4ax.com...
> I have used 160M Carolina windoms for the past 5 years or so and have
> found them to be really good performers. The higher you can get the
> vertical element off the ground the better (I have had good results
> with it only 20' off the gorund....Radioworks recommends more). I have
> never modeled it, nor had experience with G5RV, but compared to a half
> wave dipole at similar height, my "impression" is that it performs at
> least as well, probably better, plus multiband. Beward you will need
> to use a tuner with it, and if you are running legal limit, be careful
> of your SWR's as you can burn out the balun or RF choke (they are not
> traps).

Hi,

160m long 20' high ? That must be interesting and u had to confirm over 100 dx with such a length...
I very well know these problems of SWR etc,and many others. I am an OT you know,... Hi! I learnt the lesson in the past in experimenting live a bad SWR... youth errors as one tells... but interesting because I never more forget the lesson, like many others in experimenting myself.
With some respect it it far better to be chocke a second and get a little blister due to a SWR over 5:1 using a kW amp that having hours of theory... because you cannot fix your idea on concrete things.

For the rest, of course the heigth (and length) are VERY important, all using a dipole or windom all work fine or almost from 8m high and 20m long and up. Below your radiation pattern is seriously affected compared to the ideal solution (say 2-lamba over 12m high). And you feel that very well when trying to call CQ DX and even simple CQ up to 5000 km away.
To get an idea simulate these specs in modeling software like multiprop that use a VOACAP engine, or even nec, hfant and others.

See my best site for detail.
Thanks for the help.

73
Thierry, ON4SKY

There has been a lot of debate about this antenna, but I can
> tell you the 160M version works quite well on all bandsl.
> GL es 73
> Dan (k0dan)
>
> On Fri, 17 Sep 2004 15:35:28 +0200, "Thierry"
> <http://www.astrosurf.com/lombry> wrote:

>
> >
> >"Cecil Moore" <w5dxp@hotmail.com> wrote in message
> >news:414a4deb$1_4@corp.newsgroups.com...
> >> Walter Maxwell wrote:
> >> > If I may put in my two-cents worth, a dipole is a dipole. The G5RV is
a
> >dipole
> >> > and the Caroling Windom is a dipole.
> >>
> >> Hi Walt, I don't know if you know or not, but the Carolina Windom
> >> is designed for the vertical section to radiate so it has a
> >> radiation pattern which is a combination of a dipole and a vertical.
> >
> >
> >Indeed, all the interest of the thing..., hence my question.
> >But I wonder also about the QRM pick-up along this vertical segment...
> >I will have the answer in two weeks.
> >
> >Thierry, ON4SKY
> >
> >> --
> >> 73, Cecil, W5DXP
> >>
> >>
> >> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> >> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> >> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----
> >
>

3361. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 09:56:01 UTC
From: Thierry <http>
Message-ID: <414c0645@news.vo.lu>
Source record: 89382

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:f2D2d.4492$mb6.2176@newsread3.news.atl.earthlink.net...
> > Indeed, all the interest of the thing..., hence my question.
> > But I wonder also about the QRM pick-up along this vertical segment...
> > I will have the answer in two weeks.
> >
> > Thierry, ON4SKY
>
> Why would QRM be a problem ? The beter the antenna the more signal it
will
> pick up. Maybe you ment QRN (noise) instead of M (undesired radio
signals)
> ?

No ! I speak of QRM, made made, due to vertical segment (vertical polarized
I believed) that, i thougth, 'd pick up more QRM, in the same way as a
vertical antenna coupled to a dipole tight horizontally e.g..
But in this case it doesn't as this is a common-mode choke balun ; there is
no RF radiation form the coax.
In all cases I will see the result in the field very soon, adn could
appreciate both designs (dipole vs. windom).

Thierry, ON4SKY
>

3362. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 09:57:07 UTC
From: Thierry <http>
Message-ID: <414c0687$1@news.vo.lu>
Source record: 89383

"dmr" <dmr-md31@hotmail.com> wrote in message
news:2iulk0d0k7n63da9p9298ufo08ttbjcdq3@4ax.com...
> The original windom of the 1920's had a single wire (vertical)
> feedline. The Carolina Windom as sold by Radioworks has RF radiation
> from the feedline which is a deliberate design consideration of this
> antenna; it has a vertical element (the piece of coax hanging off the
> balun) which is designed to radiate,. and which creates the low angle
> lobes. The RF radiation is STOPPED at the RF choke which is at the end
> of the "feedline". Then YOU feedline connects here and essentially
> does not radiate.

I use a common chocke balun. the coax doesn radiates RF.

Thierry
>
> There is alot of information on this antenna at
> http://www.radioworks.com/, some of which contradicts some of the
> mythology which appears in the NG's and reflectors..
> 73
> Dan (k0dan)
>
> >>
> >Hi Thierry:
> >
> >The only draw back of the off center fed dipole is the possibility of
> >introducing radiation from the feedline which can make for R.F. in the
> >Shack if not properly acconted for , it also makes predicting the
> >radiation pattern a little skewed to the long end of the dipole. I Use
> >two off center fed dipoles (miss nomer windoms) here one is cut for 40m
> >long the other 20m long the 40m long one is fed with a 4:1 balun and 75
> >ohm coax the 20m long is fed with 300 ohm open wire line to a tuner.
> >both antennas do a good job for me. I do mostly causual dxing (but as
> >one poster has already said you'll have to decide which propagation mode
> >you are seeking if grayline put up a vertical or other lowangle radiator
> >for 80meters.) They are mounted at 90 degrees to each other. I've been
> >able to work lots of dx on these antennas .. I had two g5rv's up prior
> >to these and from a pure operational veiw point find them a little
> >better at my location.
> >
> >hope this is of some help.
> >73 Dave
>

3363. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 10:25:38 UTC
From: Thierry <http>
Message-ID: <414c0d36$1@news.vo.lu>
Source record: 89384

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0409171229.4aacfb07@posting.google.com...
> "Thierry" <http://www.astrosurf.com/lombry> wrote in message
news:<414a29cf@news.vo.lu>...
> > Ok Mark, for sure for DXing a dipole or a windom is not a beam...
>
> I'd rather have the coax fed dipole over the windom any day though...I
Hi,

No. For a true dipole and get a low impedance etc I prefer by far the ladder
line; The coax is easier but is less performing
This is not much difference, but measurable. I always prefered the optimum
solution.

> bet many people would think it's a beam , the way it will most likely
> trounce the average windom.
> I tried one "windom" at a field day against a coax fed dipole. The
> dipole won by 2 s units in any direction. Thats about what you would
> see going from a coax dipole to an average beam...:/ Or by changing
> from 100w to 500w-1 KW...
>

Ok. I will see but 2 S-unit are much. What is sure is that the radiation
pattern of a carolina windom is next over a dipole :
http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-radiation-pattern.gif
it is much more omnidorectionnal what could explain is overall better
performance.

>
> >
> > My objective is Dxing first as for local QSOs this is not a problem to
get
> > S9+.
>
> If it's working local, why would it not be working dx ok? Why the
> change to an antenna which basically will be the same, assuming

Local is not DX. High takeoff angle vs. very low. This is a huge difference
if you check your receive strength signal.

73
Thierry, ON4SKY

> element lengths are fairly close for a given band, barring any changes
> in feedline efficiency? IE: I assume you are going to switch from a
> G5RV to a windom....

> Thinking about either one of those antennas makes me want to take up
> golf...
> I don't like either one. It's no secret though....:(
> The only thing the G5RV has going for it, is it is nearly a EDZ on
> 20m. But it's a reduced efficiency version compared to one fed in a
> normal manner...
> Coax to a choke to ladder line as a feedline is no way to live for a
> serious dx'er who wants most of his power to actually be radiated by
> the antenna element...The windom is not much better in this
> regard....Or at least the ones I've seen.
>
> > I know very well that DX performances will be more than limited, all the
> > more in SSB, but this is a temporary solution waiting for a small beam
3-or
> > 4 ele.
>
> You still don't mention which band/s though... There are fairly simple
> wire antennas much better for dx than the usual all band compromise
> wire antenna. IE: extended double zepps, phased parallel dipoles, etc,
> etc. I would use something along those lines if I wanted to dx say 20m
> or up...If you want to dx 80/40, you might consider a bobtail curtain
> or variant, or a good vertical. Trying to increase the dx potential by
> changing from one semi lame antenna , to another semi lame antenna
> strikes me as counterproductive. But, it's your yard and $$$.... :/
> MK

3364. test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 13:00:42 UTC
From: Knarf <ve6cb@telus.net>
Message-ID: <_jW2d.23199$t61.17749@clgrps13>
Source record: 89385

[No readable article body recovered]

3365. TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 13:04:02 UTC
From: Knarf <ve6cb@NOSPAM.telus.net>
Message-ID: <6nW2d.23200$t61.1891@clgrps13>
Source record: 89386

[No readable article body recovered]

3366. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 15:36:26 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <414C5605.1D85A296@shaw.ca>
Source record: 89387

Knarf wrote:

Knarf Knarf, who's there? :-)

Irv VE6BP

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3367. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 16:55:13 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409180855.53d41252@posting.google.com>
Source record: 89388

"Thierry" <http://www.astrosurf.com/lombry> wrote in message
news:<414c0d36$1@news.vo.lu>...
> "Mark Keith" <nm5k@wt.net> wrote in message
> news:25eb70d7.0409171229.4aacfb07@posting.google.com...
> > "Thierry" <http://www.astrosurf.com/lombry> wrote in message
> news:<414a29cf@news.vo.lu>...
> > > Ok Mark, for sure for DXing a dipole or a windom is not a beam...
> >
> > I'd rather have the coax fed dipole over the windom any day though...I
> Hi,
>
> No. For a true dipole and get a low impedance etc I prefer by far the ladder
> line; The coax is easier but is less performing
> This is not much difference, but measurable. I always prefered the optimum
> solution.

In general, coax fed is usually the least loss for a single band
dipole. The system is over 95% efficient on hf. Ladder line is low
loss, but people usually use a tuner, so it ends up being slightly
lossier than the coax fed overall. If you use no tuner, the losses
could be pretty comparable to coax fed. The losses using a tuner can
be fairly low if you are careful to use least the inductance.
As far as I'm concerned, feeding a 50 ohm antenna with 50 ohm
feedline, from a 50 ohm radio is the optimum solution as far as
efficiency is concerned.
>

> >
>
> Ok. I will see but 2 S-unit are much. What is sure is that the radiation
> pattern of a carolina windom is next over a dipole :

Would be appx the same if the wires are the same length. But that
could vary if the antenna is used on higher bands, and the wires are
longer in wavelength.
> http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-radiation-pattern.gif
> it is much more omnidorectionnal what could explain is overall better
> performance.

In the real world, I doubt you would notice much directivity with any
of them, except maybe on the highest bands.
>
> >
> > >
> > > My objective is Dxing first as for local QSOs this is not a problem to

> get
> > > S9+.
> >
> > If it's working local, why would it not be working dx ok? Why the
> > change to an antenna which basically will be the same, assuming
>
> Local is not DX. High takeoff angle vs. very low. This is a huge difference
> if you check your receive strength signal.

Yes, but why would either be overly high angle? In general, this will change more due to height above ground. Changing from different types of wire antennas will do little to change that if all are at the same height. The only exception I can think of is using a long 80m dipole or other antenna on the higher bands like 10m. I've seen cases where the t/o angles were quite high, but that's kind of a special case. Unless you get them high in terms of wavelength, none are going to be real good at low angles. That's why I recommend a vertical on the lower bands, if you want dx. MK

3368. Re: Phasing for Delta Loop

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 17:06:49 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409180906.50a3f9e4@posting.google.com>
Source record: 89389

n3ow@rcn.com wrote in message news:<94qhk0di15g824shck5sf9384ued96c5s7@4ax.com>...
> I am buliding a 40 meter delta loop.
> the question I have is the phasing line should be 75ohms what I would
> like to know will RG59 work for high power or should I use RG11.
> currently I only run 100 watts but am looking for a AMP.
> thank you
> Jay N3OW

Are you sure you want a phasing line? I think you mean a series
transformer...
Yes, rg-59 should work ok for fairly high power. You would need appx
22 ft worth for 40m...RG-59 as a transformer section would probably be
ok to maybe a KW or so. If you plan on some manly legal limit 8877
loudenboomer, you might consider the rg-11...:/ MK

3369. Re: test

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 20:28:09 UTC
From: Thierry <http>
Message-ID: <414c9a6f@news.vo.lu>
Source record: 89390

do you know that there are test forupm for this ?

test.test
fr.test

Tl

"Knarf" <ve6cb@telus.net> wrote in message
news:_jW2d.23199$t61.17749@clgrps13...
>
>

3370. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 21:10:13 UTC
From: Thierry <http>
Message-ID: <414ca44a$1@news.vo.lu>
Source record: 89391

"Mark Keith" <nm5k@wt.net> wrote in message
news:25eb70d7.0409180855.53d41252@posting.google.com...
> "Thierry" <http://www.astrosurf.com/lombry> wrote in message
news:<414c0d36$1@news.vo.lu>...
> > "Mark Keith" <nm5k@wt.net> wrote in message
> > news:25eb70d7.0409171229.4aacfb07@posting.google.com...
> > > "Thierry" <http://www.astrosurf.com/lombry> wrote in message
> > news:<414a29cf@news.vo.lu>...
> > > > Ok Mark, for sure for DXing a dipole or a windom is not a beam...
> > >
> > > I'd rather have the coax fed dipole over the windom any day though...I
> > Hi,

I have a last question about the vertical coax of the carolina windom.
Imagine that the balun I have is a common mode choke balun (I am not sure
and I asked details to the manufacturer)
like on this drawing :
http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-dwg.gif

Without speaking about heigth above ground, QRG and length, how do we
explain the more or less omnidirectional pattern against a dipole, see
diagram at
http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-radiation-pattern.gif
if there is no radiation from the coaxial ?

In this case where does come from this 360° gain over a dipole that shows
"only" 4 main lobes in azimuth?
If the common mode choke is used, the diagram 'd be similar to a dipole, no
?

Thanks for comments

73
Thierry, ON4SKY

3371. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 22:12:03 UTC
From: dmr <dmr-md31@hotmail.com>
Message-ID: <igcpk016lt2g8olobsk0qo6nvhc9a3li59@4ax.com>
Source record: 89392

No, no, no.. I said the vertical element was 20' off the
ground....bottom of the vertical feedline 20' off the ground, means
antennas height in the center was about 40-50'.
dt

On Sat, 18 Sep 2004 11:51:18 +0200, "Thierry"
<http://www.astrosurf.com/lombry> wrote:

>
>"dmr" <dmr-md31@hotmail.com> wrote in message
>news:m6ulk05mq6r25e3ijq8dp672kljv7i6l76@4ax.com...
>> I have used 160M Carolina windoms for the past 5 years or so and have
>> found them to be really good performers. The higher you can get the
>> vertical element off the ground the better (I have had good results
>> with it only 20' off the gorund....Radioworks recommends more). I have
>> never modeled it, nor had experience with G5RV, but compared to a half
>> wave dipole at similar height, my "impression" is that it performs at
>> least as well, probably better, plus multiband. Beward you will need
>> to use a tuner with it, and if you are running legal limit, be careful
>> of your SWR's as you can burn out the balun or RF choke (they are not
>> traps).
>
>Hi,
>
>160m long 20' high ? That must be interesting and u had to confirm over 100
>dx with such a length...
>I very well know these problems of SWR etc,and many others. I am an OT you
>know,... Hi! I learnt the lesson in the past in experimenting live a bad
>SWR... youth errors as one tells... but interesting because I never more
>forget the lesson, like many others in experimenting myself.
>With some respect it it far better to be chocke a second and get a little
>blister due to a SWR over 5:1 using a kW amp that having hours of theory...
>because you cannot fix your idea on concrete things.
>
>For the rest, of course the heigth (and length) are VERY important, all
>using a dipole or windom all work fine or almost from 8m high and 20m long
>and up. Below your radiation pattern is seriously affected compared to the
>ideal solution (say 2-lamba over 12m high). And you feel that very well when
>trying to call CQ DX and even simple CQ up to 5000 km away.
>To get an idea simulate these specs in modeling software like multiprop that
>use a VOACAP engine, or even nec, hfant and others.
>
>See my best site for detail.
>Thanks for the help.
>

>73
>Thierry, ON4SKY
>
> There has been a lot of debate about this antenna, but I can
>> tell you the 160M version works quite well on all bandsl.
>> GL es 73
>> Dan (k0dan)
>>
>> On Fri, 17 Sep 2004 15:35:28 +0200, "Thierry"
>> <http://www.astrosurf.com/lombry> wrote:
>>
>> >
>> >"Cecil Moore" <w5dxp@hotmail.com> wrote in message
>> >news:414a4deb$1_4@corp.newsgroups.com...
>> >> Walter Maxwell wrote:
>> >> > If I may put in my two-cents worth, a dipole is a dipole. The G5RV is
>a
>> >dipole
>> >> > and the Caroling Windom is a dipole.
>> >>
>> >> Hi Walt, I don't know if you know or not, but the Carolina Windom
>> >> is designed for the vertical section to radiate so it has a
>> >> radiation pattern which is a combination of a dipole and a vertical.
>> >
>> >
>> >Indeed, all the interest of the thing..., hence my question.
>> >But I wonder also about the QRM pick-up along this vertical segment...
>> >I will have the answer in two weeks.
>> >
>> >Thierry, ON4SKY
>> >
>> >> --
>> >> 73, Cecil, W5DXP
>> >>
>> >>
>> >> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
>> >> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
>> >> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----
>> >
>>
>

3372. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 22:17:08 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <Et23d.27440$ci3.771409@twister.southeast.rr.com>
Source record: 89393

"Jim Leder" <k8cxm@hotmail.com> wrote in message
news:w6_0d.18827$w_6.11062@fe37.usenetserver.com...
> I was having a discussion with another ham about dipoles and dipole
> lengths, and a rather silly question came up that neither one of us was
sure
> of the answer. If a dipole is using INSULATED wire, can the electrical
> length be altered by just wrapping the ends more or less around the
antenna
> wire when attaching the end insulator? Or does the INSULATED wire need to
be
> cut? He thinks it does shorten the dipole, I say it doesn't. Hope he is
> right, it makes 'pruning' dipoles a lot easier.
>
> Thanks
>
A quick and dirty I learned for putting up temporary dipoles. Mount the
insulator a good bit short of the end of the antenna. Then when you prune
for resonance you will not have to keep removing and reinstalling the
insulator.

3373. half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 23:10:17 UTC
From: "Mark T. Kennedy" <mtk@acm.org>
Message-ID: <ciif97rbe1@newsmaster.cc.columbia.edu>
Source record: 89394

i live in a neighborhood where the sight of a half-wave dipole would
cause a riot. however, a portion of my property is heavily wooded.
i could easily hide even a 160m half-wave among the branches and leaves,
leaving it invisible. is this practical? risky? caveat: i'm still
studying for my technician's license so go easy on me :-).

/mark

3374. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 23:39:16 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414cc72b_6@corp.newsgroups.com>
Source record: 89395

Thierry wrote:
> But I wonder also about the QRM pick-up along this vertical segment...
> I will have the answer in two weeks.

It is designed to radiate some vertically polarized energy so it
is also designed to receiver some vertically polarized energy.
That would render the Carolina Windom virtually useless at my QTH.
--
73, Cecil, W5DXP

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http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3375. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-18 23:53:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414cca69_6@corp.newsgroups.com>
Source record: 89396

Thierry wrote:
> Without speaking about heigth above ground, QRG and length, how do we
> explain the more or less omnidirectional pattern against a dipole, see
> diagram at
> http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-radiation-pattern.gif
> if there is no radiation from the coaxial ?

The vertical coax section between the impedance matching device at the
feedpoint and the RF choke is designed to radiate and it does. The
coax between the RF choke and the source is designed not to radiate.
--
73, Cecil, W5DXP

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3376. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 00:28:00 UTC
From: K5VSE <k5vse@earthlink.net>
Message-ID: <ko43d.1337$qA6.664@newsread3.news.pas.earthlink.net>
Source record: 89397

I live in the forest, and use a couple of resonant dipoles hiding in the trees. I have no problems at all. Once, during our ice storm, one of them came down when a tree broke off and fell. SWR is fine, and get good signal reports.

Go for it.

--
Mike-K5VSE
Formerly WB6VSE, Senior Tech, Amateur Division, SBE/Linear Systems
Watsonville, CA
All out going Email, scanned with Norton Anti-Virus 2004
"Radios That Glow in the Dark"
"3922 khz".

3377. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 01:11:41 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <h153d.22692$sX4.11905@newssvr29.news.prodigy.com>
Source record: 89398

K5VSE wrote:
> I live in the forest, and use a couple of resonant dipoles hiding in the
> trees. I have no problems at all. Once, during our ice storm, one of them
> came down when a tree broke off and fell. SWR is fine, and get good signal
> reports.
>
> Go for it.
>
>
Only caviet-- You need at least a general for 30 MHz, or below, but
the absorbsion of rf at those freqs is minimal, tho the HEIGHT, at lower freqs
for a good pattern (for long distance) might be a problem. But , say on 80-40
even at around 20 foot elevation, can work reliably several hundred miles!
20 and up meters shouldn't present much of a problem, and at 6 and 2 meters yagi
be best bet, but relatively small size. Have fun- Jim NN7K

3378. LF: PC IF bandscope plans/info

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 02:05:37 UTC
From: streamliner@aol.com
Message-ID: <414ce72a.3620946@usenet.magma.ca>
Source record: 89399

Looking for info on building a bandscope/spectrum display to adapt to
a Kenwood TS-2000. Google turned up a few ideas but nothing usefull.
Planning to interface the receiver broadband IF prior to DSP filtering
to an adapter of some sort then into a PC for processing and display
of at least a 100 khz band spectrum. Anyone know of such a device and
where I might find technical information to build one. 73.s and TIA
Joko

3379. Re: Where to locate low pass filters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 02:24:31 UTC
From: Tod Glenn <webmaster@cordite.com>
Message-ID: <webmaster-8FBA34.19243018092004@corp.supernews.com>
Source record: 89400

In article <20040917210945.15036.00003538@mb-m02.aol.com>,
k9sqg@aol.com (K9SQG) wrote:

> The best place is at the output of the transmitter or linear amplifier.

Thanks all who answered.

Tod

3380. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 04:01:49 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <H4-dnZYCCZMEmdDcRVn-oQ@comcast.com>
Source record: 89401

"Mark T. Kennedy" <mtk@acm.org> wrote in message
news:ciif97rbe1@newsmaster.cc.columbia.edu...
>i live in a neighborhood where the sight of a half-wave dipole would cause
>a riot. however, a portion of my property is heavily wooded.
> i could easily hide even a 160m half-wave among the branches and leaves,
> leaving it invisible. is this practical? risky? caveat: i'm still
> studying for my technician's license so go easy on me :-).
>
> /mark

I have several wire antennas strung between trees, and found that even #14 or #16 wire with black or blue insulation at 50 feet is invisible against the trees, and almost invisible when viewed against the sky. What sticks out is the feedline, if it is hanging in the clear. You want that coming down next to a tree. You really don't want contact between the wire and branches. However, my 75m antenna goes through branches at one point, and it seems to be OK. Stay away from white, yellow, or red insulation.

Tam/WB2TT

3381. -------> WANTED - LAW ENFORCEMENT PATCHES <--------

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 06:21:16 UTC
From: jdpg2000@hotmail.com
Message-ID: <wz93d.219080$mD.49521@attbi_s02>
Source record: 89402

WE PAY CASH!

We buy Police, Fire, Federal patches. If you have patches or a patch collection that you're interested in selling, please email us with description and quantity available.

We will consider purchasing other types of patches, please email me with description and quantity available.

Thanks

Jim

jdpg2000@hotmail.com

3382. Re: Clemens match modelling

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 07:54:17 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <8EoKbLApsTTBFwQt@b-howie.demon.co.uk>
Source record: 89403

In message <10kmca1r2mfdmeb@corp.supernews.com>, Roy Lewallen
<w7el@eznec.com> writes
>Gamma-type matches consist of a small loop containing a source. This
>type of geometry can be a problem for NEC, and often produces the
>symptom you describe. You should have the progam report the average
>gain (see the NEC documentation on the RP "card"), and use it to
>correct the gain, unless you can rearrange the loop to get the average
>gain close to 1. MININEC-based programs don't have this problem with
>small loops -- they have other problems instead.
>
>EZNEC users will see the average gain reported at the bottom of the
>main window after every 3D calculation, and its meaning and use
>described in the manual. However, note that EZNEC normalizes the
>correct average gain to a standard value of 1 with or without ground,
>while NEC will report a value of 0.5 (or 2, I don't recall for certain)
>when everything is ok but a ground is present.

Thanks,

That seems to account for it; -2dB average gain and -0.6db for a
conventional gamma match.

73 Brian

--
Brian Howie

3383. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 10:39:15 UTC
From: Knarf <ve6cb@NOSPAM.telus.net>
Message-ID: <nld3d.25377$yW6.7001@clgrps12>
Source record: 89404

Just checking to see if I can post with a "Munged" e-mail address to minimize spam. Also an alias, with my name backwards, is supposed to cut down on the probability of such junk. Almost never post on NGs, but now feel a bit safer. Did post here a few days ago, and already seeing spam increasing. Bypassing ISP's filter, and experimenting with "MailWasher". So far in three months it does not seem to be working.

Regards,

Frank

(VE6CB)

"Irv Finkleman" <finkirv@shaw.ca> wrote in message
news:414C5605.1D85A296@shaw.ca...
> Knarf wrote:
>
> Knarf Knarf, who's there? :-)
>
> Irv VE6BP
>
> ---------------------------------------
> Visit my HomePage at http://members.shaw.ca/finkirv/
> Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
> Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/
> --------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

3384. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 13:35:48 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <N62dnQKft6WtFtDcRVn-og@comcast.com>
Source record: 89405

K5VSE wrote:
> I live in the forest, and use a couple of resonant dipoles hiding in the
> trees. I have no problems at all. Once, during our ice storm, one of them
> came down when a tree broke off and fell.

Please allow me to apologize in advance, but I can't resist asking:

"If a dipole falls in a forest and there's no one there to hear it,
does it make a sound?"

73,

John NU3E :-)

3385. Re: Fan dipole in attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 13:54:14 UTC
From: John DeGood <nu3e@arrl.net>
Message-ID: <w8KdnQ0l1fYcEtDcRVn-oQ@comcast.com>
Source record: 89406

Jack Twilley wrote:

> My new location has a short narrow attic with a traditional shape --
> gentle pitch from a raised ridge which crosses the house along the
> long axis, like a triangular prism. I have a fan dipole from my last
> location that I'd like to try to reuse. Will I be able to get away
> with putting the longest legs of the dipole along the center line,
> parallel to the ground, and then putting the shorter legs (what was
> once an inverted vee) angling towards the corners of the roof?

Yes it will "work", but the 40 meter dipole (and depending on the elevation of your attic, possibly the 20 meter dipole as well) will probably function as high angle radiators. If NVIS communication on 40 meters is your goal, you may view this as a good thing. But NVIS communication on 20 meters isn't common, so expect mediocre performance on that band if you don't have at least a 2 or 3 story house.

73, John NU3E

3386. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 14:00:00 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414d910e_7@corp.newsgroups.com>
Source record: 89407

Bill Turner wrote:
> The voltage at the ends of a half wave dipole can reach thousands of
> volts even with relatively low power. Trees have been set on fire with
> as low as 100 watts. Be careful!

A rule-of-thumb that I use is: For a resonant half-wave
dipole, the voltage at the ends is *about* 20 times the
feedpoint voltage, nothing to be sneezed at.
--
73, Cecil http://www.qsl.net/w5dxp

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3387. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 14:48:51 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2r5knsF16g3eiU1@uni-berlin.de>
Source record: 89408

That depends upon whether it is a pole (tree) that is dying.

"John DeGood" <nu3e@arrl.net> wrote in message
news:N62dnQKft6WtFtDcRVn-og@comcast.com...
> K5VSE wrote:
> > I live in the forest, and use a couple of resonant dipoles hiding in the
> > trees. I have no problems at all. Once, during our ice storm, one of
them
> > came down when a tree broke off and fell.
>
> Please allow me to apologize in advance, but I can't resist asking:
>
> "If a dipole falls in a forest and there's no one there to hear it,
> does it make a sound?"
>
> 73,
>
> John NU3E :-)

3388. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 14:59:20 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040919105920.17257.00000767@mb-m25.aol.com>
Source record: 89409

I have 160m Inverted Vee in the trees, works fine. Just make sure that the ends (last third) are in the clear. They have high voltage and prone to ignite fires when situation favorable. Use insulated wire.

Yuri, K3BU.us

3389. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 15:47:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ab9rk0talvb1gr8pnr7qbvb4gmbic38r5u@4ax.com>
Source record: 89410

On Sun, 19 Sep 2004 10:39:15 GMT, "Knarf" <ve6cb@NOSPAM.telus.net>
wrote:
>Just checking to see if I can post with a "Munged" e-mail address to
>minimize spam. Also an alias, with my name backwards, is supposed to cut
>down on the probability of such junk.

Hi Frank,

This is dreaming in technicolor and surround-sound. I post with my
full name and address in the clear and as a consequence never "see" as
much as one spam in a month. Certainly my filters kill up to 10 a
day, but as I said, I don't "see" them - takes all of two or three
seconds to automagically wipe them out on start up or take them out
like a bug-zapper when they straggle in.

I get far more spam on my business account with my address registered
with government agencies. I have to add one or two new spammers to my
kill file there each week and that currently outnumbers my killfile
here 7:1. The spam that I do see here isn't even addressed to me.

73's
Richard Clark, KB7QHC

3390. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 15:58:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cikab9nit1@hercules.btinternet.com>
Source record: 89411

> "If a dipole falls in a forest and there's no one there to hear it,
> does it make a sound?"
>
==========

Yes. All falling trees make a sound. But if there's nobody to hear it who cares?

But this business about 100 watt transmitters causing forest fires is exaggerated. Even if there's a conjugal impedance match between a dead leaf and the transmitter there's little to worry about even when its not raining. And the density of foliage is hardly likely to allow flames, should they occur, to leap from one leaf to another.

The climate and type of tree involved is, of course, of some consequence. Deciduous trees and those found in South American and Indianesian jungles can be disregarded from this discussion,

If you should live in Australia, the home of Eucaliptus trees, during the dry season, and it's always dry, there is a one in 100 million chance of a tree catching fire by radio. Always supposing by some remote chance it hasn't first been struck by lightning.

Eucaliptus trees positively enjoy fire. They depend on it to propagate efficiently. This may be an unfortunate trait insofar as kangaroos and wallabies are concerned but alligators are quite happy with the way things have been arranged. The Aussies themselves take care not to build their houses too near to eucaliptus plantations. The Abbo's, with their 50,000 years of experience, radio or not, are quite happy and sensible enough to leave things as they are.

The USA has wide variations in climate and tree population. Thoughtful citizens ought to concentrate their minds on hurricanes, twisters, atmospheric pollution and gun laws. 100-watt transmitters and G5RV's can look after themselves. ;o)

Reg.

3391. Qst article

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 17:49:56 UTC
From: rob <rob34115@earthlink.net>
Message-ID: <8Fj3d.1952$qA6.685@newsread3.news.pas.earthlink.net>
Source record: 89412

Does anyone have july 1999 QST article about converting the Radio Shack fm antenna into a 2m beam? I would like to get a copy of it, if someone could scan it and e-mail it to me. Thanks, Rob WB8VWI

3392. Re: QST article

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 18:10:26 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <mYj3d.333055$8_6.180434@attbi_s04>
Source record: 89413

"rob" <rob34115@earthlink.net> wrote in message
news:8Fj3d.1952$qA6.685@newsread3.news.pas.earthlink.net...
> Does anyone have july 1999 QST article about converting the Radio Shack fm
> antenna into a 2m beam? I would like to get a copy of it, if someone could
> scan it and e-mail it to me. Thanks, Rob WB8VWI

Rob -

Also check with your local libraries.

gb

3393. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 19:01:15 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <%Hk3d.27$cN6.16@lakeread02>
Source record: 89414

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote

> The USA has wide variations in climate and tree population. Thoughtful
> citizens ought to concentrate their minds on hurricanes, twisters,
> atmospheric pollution and gun laws. 100-watt transmitters and G5RV's can
> look after themselves. ;o)
> ---
> Reg.

I assure you we are concentrating very carfefully, Reg! Last week we had about 20,000 gun laws on the books, counting all federal and state laws. This weekend we have one less federal gun law, and soon there may be less. When free people use their minds instead of letting foolish emotions be their guide, the concept of restricting firearms from law abiding citizens is one of the first things to go.

Btw, so far my dipole hasn't set the pine trees on fire, or been torn down by a hurricane, despite three attempts by them so far this year ;-)

73,

Jack

3394. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 19:54:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9fmrk09lsrbevoi6olqe3a8u7n7fg0fjav@4ax.com>
Source record: 89415

On Sun, 19 Sep 2004 15:01:15 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>When free people use their minds instead of letting foolish emotions be
>their guide, the concept of restricting firearms from law abiding citizens
>is one of the first things to go.

Hi Jack,

The D.C. sniper (a known non-law abider) got his firearm from non-law abiding citizens out the back door of a local gun-shop here. Foolish emotions had nothing to do with their inability to account for several hundred missing guns they just shrugged off as bookkeeping discrepancies. Clearly they had more guns than necessary to stay profitable. Imagine how long your supermarket would stay in business at that kind of employee pilfering rate.

Now, if we bring the foolish emotion issue into it, then Mr. John Allen Muhammad, clearly an emotional person, could now simply walk up to the counter and get more bang for his buck. And if denied, I suppose he would have had to pay more at the back door.

James D. Martin,
James Buchanan,
Kumar Walekar,
Sarah Ramos,
Lori Ann Lewis-Rivera,
Pascal Charlot,
Woman shot, wounded,
13-year-old boy wounded,
Dean Harold Myers,
Kenneth H. Bridges,
Linda Franklin,
37-year-old man shot,
Conrad Johnson,
killed or wounded between October 2 and October 22.

Another foolish, emotional personality that appeared before committees to argue that we retain the prohibition against assault rifles was Reagan's Press Officer James Brady. One may say he is emotional simply because he survived being shot (the alternative is being un-emotionally dead).

Well, let's just mark it up to the dispassionate tenor of the Republican Guard who have over the years jettisoned Reagan's mandates as easily as they shrugged off the prohibition against assault

weapons. The Republican Guard has even offered laws to reduce the liability of the local gun shop and emotional others like them that whine they are too hard pressed by rational laws to balance their books or lock their back doors. The example of the Russian school debacle where the collapse of rational law has seen plenty of assault weapons were available makes the Columbine massacre seem like a Saturday afternoon picnic.

"In countries like the Untied States, it's
perfectly legal for members of the public
to own certain types of firearms. If you live
in such a country obtain an assault rifle
legally, preferably an AK-47 or variations"
-- Al Qaeda training manual
the Ossama seal of approval to our nation's administration

73's
Richard Clark, KB7QHC

3395. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:05:07 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414df487_6@corp.newsgroups.com>
Source record: 89416

Richard Clark wrote:
> The D.C. sniper (a known non-law abider) got his firearm from non-law
> abiding citizens out the back door of a local gun-shop here.

Exactly! If one advocates disarming *law-abiding citizens*,
one is siding with the *non-law abiders*. Advocating disarming
non-law abiders by creating laws that are only obeyed by law-
abiding citizens is ridiculous. We might as well create a law
making it illegal for hurricanes to hit Florida.

Hitler, Mao, and Stalin all supported strict gun control laws.
If one likes gun control laws, some of the most severe will be
found in Castro's Cuba at the present time. So Richard, if you
don't like the second amendment and want to feel really safe,
simply move to Cuba. :-)
--
73, Cecil, W5DXP

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3396. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:12:12 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <GCg857XsYfTBFwXv@g3ohx.demon.co.uk>
Source record: 89417

```
In message <Wyn1d.43162$Ka6.15258@okepread03>, Jack Painter
<223bthp@cox.net> writes
>
>"see sea oh ecks at you aitch see dot comm" <spammers@bugger.off.invalid>
>wrote
>
>> Jack Painter <223bthp@cox.net> wrote:
>> > We who speak the most English make the rules.
>>
>> > It has always been "month-day-year" in the United States of America.
>>
>> Oh yes - we forgot that there are more American English speakers in
>> the world than English speakers.
>>
>> Not!
>> --
>> Chris Cox, N0UK/G4JEC NIC Handle: CC345
>
>In fact, there are few countries, and Britain is definitely not one of them,
>that teach or speak proper English. It is a language butchered in
>pronounciation by all that England influenced, and was only corrected in
>teaching and pronounciation in America. We speak English, not an adaptation
>of it. If your understanding of this fact is lacking, there are many places
>for you to correct your deficiency, but it will not be here.
>
>73,
>
>Jack
>
>

There ain't no word 'pronounciation' - even in American.
Ian.
--
```

3397. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:13:44 UTC
From: Thierry <http>
Message-ID: <414df6a9$1@news.vo.lu>
Source record: 89419

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:414cca69_6@corp.newsgroups.com...
> Thierry wrote:
> > Without speaking about heigth above ground, QRG and length, how do we
> > explain the more or less omnidirectional pattern against a dipole, see
> > diagram at
> >
http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-radiation-pattern.gif
> > if there is no radiation from the coaxial ?
>
> The vertical coax section between the impedance matching device at the
> feedpoint and the RF choke is designed to radiate and it does. The
> coax between the RF choke and the source is designed not to radiate.
> --

Hi Cecil,

it is well what i though, but in my case this is a Carolina Windom like on
this drawing
http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-dwg.gif

The balun is attached to the wire and there is no segment above it. the coax
enter the balun and the otehr side goes to the TX
hence my question. And is this design still a Carolina Windom, excepted the
segemnts of 1/3 2/3, it looks more to a hybrid between the dipole and the
Windom... isn't it ?
And on this model, if it uses a choke balun (what is not sure) the coax 'd
not radiate RF, othewhise of course if radiate much, like an vertical

Thierry, ON4SKY

> 73, Cecil, W5DXP
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
> http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
> -----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3398. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:15:15 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <axjLFHajbfTBFw37@g3ohx.demon.co.uk>
Source record: 89418

In message <41460964.215847271@news.blueyonder.co.uk>, Peter
<microwaves@blueyonder.co.uk> writes
>On Mon, 13 Sep 2004 16:38:15 -0400, "Jack Painter" <223bthp@cox.net>
>wrote:
>
>>We speak English, not an adaptation
>>of it
>
>I beg to differ!
>
> I don't think the word "Hi" is English yet it's the ubiquitous
>greeting in the US (and unfortunately over here in the UK also).
>Why do Americans write "meter" for "metre", " thru" for "through",
>"dove" for "dived" , "I've gotten" for " I've got", etc, etc?
>Somehow I don't think the Pilgrim Fathers brought all that over from
>the Old Country!
>
>Americans speak American and we speak English ... 'nuff said!
>
>Peter, G3PHO

'Hi' is Scandinavian.
Ian.
--

3399. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:32:26 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <KVm3d.6821$n16.6200@newsread2.news.atl.earthlink.net>
Source record: 89420

> it is well what i though, but in my case this is a Carolina Windom like on
> this drawing
> http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-dwg.gif
>
> The balun is attached to the wire and there is no segment above it. the
coax
> enter the balun and the otehr side goes to the TX
> hence my question. And is this design still a Carolina Windom, excepted
the
> segemnts of 1/3 2/3, it looks more to a hybrid between the dipole and the
> Windom... isn't it ?
> And on this model, if it uses a choke balun (what is not sure) the coax 'd
> not radiate RF, othewhise of course if radiate much, like an vertical
>
> Thierry, ON4SKY

What you have is the standard Off Center Fed antenna. A true Windom is fed with a single wire about 1/3 the distance from one end. Many are calling the OCF antenna a Windom which it is not. The OCF antenna is often called a Windom by mistake. The Carolina Windom has about 6 meters of coax that is vertical below the horizontal part and then a common mode choke. The vertical is suspose to radiate some signal for DX and the horizontal is for a higher angle of radiation for the close in stations. I don't know if it actually works this way in practice , but that is their selling point. Here is a URL for the Carolina Windom.

http://www.radioworks.com/ccwcover.html

3400. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:44:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t5vrk0pocjfhi5vqkhla7nvtd0bt372esk@4ax.com>
Source record: 89321

On Sun, 19 Sep 2004 16:05:07 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Hitler, Mao, and Stalin all supported strict gun control laws.
Bush, Arrafat, the Columbian Drug Lords and Ossama do not.

3401. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 21:53:24 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <qdn3d.44735$Ka6.23704@okepread03>
Source record: 89322

"Richard Clark" <kb7qhc@comcast.net> wrote
> "Jack Painter" <223bthp@cox.net> wrote:
>
> >When free people use their minds instead of letting foolish emotions be
> >their guide, the concept of restricting firearms from law abiding
citizens
> >is one of the first things to go.
>
> Hi Jack,
>
> The D.C. sniper (a known non-law abider) got his firearm from non-law
> abiding citizens out the back door of a local gun-shop here. Foolish
> emotions had nothing to do with their inability to account for several
> hundred missing guns they just shrugged off as bookkeeping
> discrepancies. Clearly they had more guns than necessary to stay
> profitable. Imagine how long your supermarket would stay in business
> at that kind of employee pilfering rate.

Hi Richard, what's your point here, that more gun laws would deter crime
against gun stores? Not! Stolen guns don't react to laws making them illegal
in the first place, and neither do criminals who can smuggle tens of
millions of pounds of contraband and aliens int the country every year have
any problem, now or ever, obtaining firearms. Same of course goes for the
Ur-a-Peon's who have successfully disarmed their sniveling subjects as the
rate of violent crimes against them skyrockets. More police-state control,
such as you called "rational law" must be required for them, since disarming
the law abiders did not stop the crime waves.

> Now, if we bring the foolish emotion issue into it, then Mr. John
> Allen Muhammad, clearly an emotional person, could now simply walk up
> to the counter and get more bang for his buck. And if denied, I
> suppose he would have had to pay more at the back door.

You don't know anyone or any store that makes such illegal sales in your
city, and neither does the BATF, who harass gun store owners about their
bookeeping more than the NRC watches hopsitals to keep track of their
dangerous radioactive materials.

/snip
> Another foolish, emotional personality that appeared before committees
> to argue that we retain the prohibition against assault rifles was
> Reagan's Press Officer James Brady. One may say he is emotional
> simply because he survived being shot (the alternative is being
> un-emotionally dead).

There is more emotion than you will hopefully ever know, than if the life of a loved one was taken because they were too timid, (too emotionally irrational) or too restricted in the ability to protect themselves from a common or uncommon criminal, who uses firearms as a tool of their trade, irrespective of any gun law ever enacted now or in the future. Don't confuse free speech of Jim Brady with our right to prevent getting shot in the head ourselves. All the cops and secret service carrying automatic weapons and trained to spot and actually prevent such attack from succeeding failed. How in God's name do you think anyone could be protected? Maybe your Ted Kennedy who's armed bodyguards surround the scotch-reeking murderer 24-7 as he lobbys for the disarmament of all law abiding citizens?

> Well, let's just mark it up to the dispassionate tenor of the
> Republican Guard who have over the years jettisoned Reagan's mandates
> as easily as they shrugged off the prohibition against assault
> weapons. The Republican Guard has even offered laws to reduce the
> liability of the local gun shop and emotional others like them that
> whine they are too hard pressed by rational laws to balance their
> books or lock their back doors. The example of the Russian school
> debacle where the collapse of rational law has seen plenty of assault
> weapons were available makes the Columbine massacre seem like a
> Saturday afternoon picnic.

The collapse of rational law? My friend, you mistake the iron fist of martial law and governmental murder by edict that ruled the Soviet Union for rational law?

The world is at war (or will come to that relaization as they die in sufficient mass numbers) against the nation of islam, who is sworn to a new level of their timeless hatred for all things rational and peaceful. What happened in Russia is an act of that war, and does not reduce to technical descriptions of the tools used to carry out the attack.

In two recent school shootings in America, it was a teacher in one case and a student in another that ran to their cars, and retrieved legally owned firearms that enabed them to stop the killings and subdue the attacker! No police force, not even the iron fist of the former iron curtain could *ever* respond to a crazy person trying to commit mass murder faster than an armed citizenry can. Count your blessings that you have always lived in such an armed and peaceful citizenry, with citizens who will step up to the plate to defend your miserable and pathetic existance that relies on the bravery and good citizenry that you lack, and would save you from the attack you spend your life trying to prevent them from being able to do for you or their loved ones. Just don't call yourself a citizen, not in my Country.

>
> "In countries like the Untied States, it's
> perfectly legal for members of the public
> to own certain types of firearms. If you live
> in such a country obtain an assault rifle
> legally, preferably an AK-47 or variations"
> -- Al Qaeda training manual
> the Ossama seal of approval to our nation's administration

That's really sad, and I liked you a lot more when I thought you could keep such drivel from a good argument. Surely you don't believe that Al Queda pretended to be planning anything now or later, that would rely on compliance with laws to accomplish. I am offended by your comment that our government approves of Bin Laden in any way, or does anything to make it easier for him to murder Americans. It offends the sensibilities of all humans in fact.

>
> 73's
> Richard Clark, KB7QHC

Try to pay attention to who the enemy is Richard. It is not lawful American firearm owners who would gladly add you to the list of terrorist organizations if you persist in subverting the rights both enumerated and not enumerated by the Constitution. That you may continue to live as a free man while actively subverting our Constitution is a priviledge that I wish you did not have, but hopefully you are educable before your old age renders that possibility moot.

Jack Painter

3402. Re: Qst article

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 22:19:52 UTC
From: Eskay <spark_gap2000@yahoo.ca>
Message-ID: <1t7t29n3uk3jn$.c0g999vp6e3p.dlg@40tude.net>
Source record: 89323

On Sun, 19 Sep 2004 17:49:56 GMT, rob wrote:

> Does anyone have july 1999 QST article about converting the Radio Shack
> fm antenna into a 2m beam? I would like to get a copy of it, if someone
> could scan it and e-mail it to me. Thanks, Rob WB8VWI

Will be happy to do that for you.
Just confirm to ve3jua at arrl.net

3403. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 22:25:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0f0sk0553eb3i7e7a387si0v0e7iijcqlo@4ax.com>
Source record: 89324

On Sun, 19 Sep 2004 17:53:24 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>You don't know anyone or any store that makes such illegal sales in your
>city, and neither does the BATF

Hi Jack,

It is already been LONG documented:
" Bushmaster Firearms Inc. of Maine will pay $550,000, all of
which is covered by its insurance policy. And Bull's Eye Shooter
Supply, in Tacoma, will pay $2 million, the largest settlement of
its kind by a gun dealer, the Brady Center said."

I would pause to add that the "Brady" of the Brady Center has already
been dissed by the Republican Right Whiners. Clearly they would
prefer that Bull's Eye paid nothing and perhaps give Bushmaster a
rebate. And if Brady hadn't taken a bullet for Reagan, what kind of
spin would they have to offer? A marksmanship medal for Hinkley?

"Federal agents traced the weapon used in a number of the
shootings, a .223-caliber XM 14 Bushmaster rifle, back to Bull's
Eye."

The linkage was proven through target practice shells obtained at the
sniper's former address - HERE locally.

"The shop had problems for several years. Records show that Bull's
Eye could not account for the sales of 238 weapons"

"Its security was so abysmal that it appears that a 17-year-old,
Malvo, was able to stroll into the store and stroll out holding a
3-foot-long assault rifle," Lowy said. "And Bull's Eye didn't even
know the gun was missing until the police called several weeks
later to tell them it was found in the trunk of the snipers' car."

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Let's see, you cannot catch a kid walking out with a 3 foot assault
rifle every day of the week for a year (we will skip holidays and
weekends when they are more diligent). Yeah, right, that's how it
happened! Shoplifters every day for a year and no one notices it at
the till, or in the records, or in the stock room. Clearly a society
of profitable retards if we are to believe that.

If Safeway did business like that, they would fold in a week.

73's
Richard Clark, KB7QHC

3404. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 22:31:38 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <cv1sk09670d0iq8354tbee9gd5hho88qff@4ax.com>
Source record: 89325

On Sun, 19 Sep 2004 15:01:15 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
>
>> The USA has wide variations in climate and tree population. Thoughtful
>> citizens ought to concentrate their minds on hurricanes, twisters,
>> atmospheric pollution and gun laws. 100-watt transmitters and G5RV's can
>> look after themselves. ;o)
>> ---
>> Reg.
>
>I assure you we are concentrating very carfefully, Reg! Last week we had
>about 20,000 gun laws on the books, counting all federal and state laws.
>This weekend we have one less federal gun law, and soon there may be less.
>When free people use their minds instead of letting foolish emotions be
>their guide, the concept of restricting firearms from law abiding citizens
>is one of the first things to go.

Jack, please explain why we need battlefield weapons in a civilian
society.

How many times do you need to shoot that beautiful deer before you
drag it to the sausage maker?

bob
k5qwg

>
>Btw, so far my dipole hasn't set the pine trees on fire, or been torn down
>by a hurricane, despite three attempts by them so far this year ;-)
>
>73,
>
>Jack
>

3405. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:01:16 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <0do3d.44739$Ka6.30207@okepread03>
Source record: 89326

"Richard Clark" <kb7qhc@comcast.net> wrote
"Jack Painter" <223bthp@cox.net>
> wrote:
>
> >You don't know anyone or any store that makes such illegal sales in your
> >city, and neither does the BATF
>
> Hi Jack,
>
> It is already been LONG documented:
> " Bushmaster Firearms Inc. of Maine will pay $550,000, all of
> which is covered by its insurance policy. And Bull's Eye Shooter
> Supply, in Tacoma, will pay $2 million, the largest settlement of
> its kind by a gun dealer, the Brady Center said."

Hi Richard, this is exactly why there must be a stop brought to the assanine litigious fervor that ambulance chasing loafs like John Edwards bring against this country's honest businesses every day. Bushmaster's insurance paid that token of "shut-up idiot and go away" ransom, not Bushmaster. If left to Bushmaster, it would have gone to a very expensive trial and in the end, like every other case in history (except one communist judge in NY) it would have been dismissed. Does the Brady center tell you that? Look it up before you listen to any more of that dribble that an intelligent and worldy man such as your self has no business falling for. Which is again, why we must make the law read that *losers* in assanine cases like that pay *all* the legal bills. Either that or else ban lawsuits against gunmakers. You pursue these unconstitutional bans against guns and gun owners, well then we'll ban your lawsuits. Have it you way, you're going to make enemies of yourselves either way and the rest of us will go on with our lives. Even defending yours.

/dribble snipped/

> "The shop had problems for several years. Records show that Bull's
> Eye could not account for the sales of 238 weapons"

> "Its security was so abysmal that it appears that a 17-year-old,
> Malvo, was able to stroll into the store and stroll out holding a
> 3-foot-long assault rifle," Lowy said. "And Bull's Eye didn't even
> know the gun was missing until the police called several weeks
> later to tell them it was found in the trunk of the snipers' car."
>
> Copyright © 2004 The Seattle Times Company

Gee what kind of idiots do you grow in Seattle? It's liberal-land for crying out loud, don't any of you folks obey the law? We take gun shop owners to

jail for less than that in the East, and ruin their lives for trying to make an honest living most of the time.

>
> 73's
> Richard Clark, KB7QHC

73,

Jack

3406. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:14:51 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Lpo3d.44740$Ka6.683@okepread03>
Source record: 89327

"Bob Miller" <rmiller47@satx.rr.com> wrote

"Jack Painter" <223bthp@cox.net> wrote:
>
> >
> >"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote
> >
> >> The USA has wide variations in climate and tree population. Thoughtful
> >> citizens ought to concentrate their minds on hurricanes, twisters,
> >> atmospheric pollution and gun laws. 100-watt transmitters and G5RV's
can
> >> look after themselves. ;o)
> >> ---
> >> Reg.
> >
> >I assure you we are concentrating very carfefully, Reg! Last week we had
> >about 20,000 gun laws on the books, counting all federal and state laws.
> >This weekend we have one less federal gun law, and soon there may be
less.
> >When free people use their minds instead of letting foolish emotions be
> >their guide, the concept of restricting firearms from law abiding
citizens
> >is one of the first things to go.
>
> Jack, please explain why we need battlefield weapons in a civilian
> society.
>
> How many times do you need to shoot that beautiful deer before you
> drag it to the sausage maker?
>
> bob
> k5qwg

Hello Bob, whether I used a bow and arrow, a single shot musket, or an autoloader Remmington .308 rifle to take a deer is not the point. Self defense and American's right to keep and bear arms is not about hunting. Nowhere in the Constitution do any of the founding fathers who adamantly supported our permanent right to keep and bear arms, mention "hunting" or "sport".

Radio is regulated because the airwaves belong to the pubic. Use of a radio for survival (of life or property I will add) is not regulated in any way. Firearms are regulated because it is reasonable to restrict felons (ie: not peaceable citizenry) access to them, the same as we restrict the mentally or physically incapable or repeat offender drunks from driving an automobile on

our public roads. But use of a firearm for self-defense is not regulated by any Constitutional-supported law, although some states make saving your own life a near crime. In Britain it *is* a crime to defend your life *or* property with a firearm, and there are recent cases to prove that is the intent of the crown to make it so. Please don't pretend there is a legislature who upholds anything in Britain. If it were not for a very few brave men left there, the whole place would just fold to muslims and dutch pedophiles the way the rest of europe already has. To our brave friends in Britain, come to America, we await you with open "arms".

So Bob, whether an american owns a pistol, muskey, sport rifle, hunting rifle, assault rifle or sausage maker, it's none of your damn business anymore than your choice of radio manufacture or your ability to fix it or improve it is mine.

73,

Jack

>
>
> >
> >Btw, so far my dipole hasn't set the pine trees on fire, or been torn down
> >by a hurricane, despite three attempts by them so far this year ;-)
> >
> >73,
> >
> >Jack
> >
>

3407. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:19:24 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e13ff$1_8@corp.newsgroups.com>
Source record: 89328

Thierry wrote:
> it is well what i though, but in my case this is a Carolina Windom like on
> this drawing
> http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-dwg.gif
>
> The balun is attached to the wire and there is no segment above it. the coax
> enter the balun and the otehr side goes to the TX
> hence my question. And is this design still a Carolina Windom, ...?

Good Grief! No, that is *NOT* a Carolina Windom, which is an antenna
sold by Radio Works. Hopefully, they have it copyrighted and therefore
can object to the above BS. See it at

http://www.radioworks.com/ccwcover.html

The antenna you mention is simply an off-center-fed dipole, not really
a Windom at all. (Why are people with 65 IQ's allowed to build web pages?)
--
73, Cecil, W5DXP

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3408. NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:24:22 UTC
From: Antennas for Light <as98p3u4hq8@Hotmail.com>
Message-ID: <414e1530@post.usenet.com>
Source record: 89329

**** Post for FREE via your newsreader at post.usenet.com ****

WASHINGTON (Reuters) -- Researchers ... have invented an antenna that captures visible light in much the same way that radio antennas capture radio waves. ...tiny carbon nanotubes...

<snip>

http://edition.cnn.com/2004/TECH/science/09/17/light.antenna.reut/index.html

For some reason - it reminds me of Isaac Asimov's fictional 'anopticon' - although the technology is different.

-=-=-=

3409. Re: Qst article

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:25:48 UTC
From: rob <rob34115@earthlink.net>
Message-ID: <0Ao3d.105$g42.67@newsread3.news.pas.earthlink.net>
Source record: 89330

rob wrote:
> Does anyone have july 1999 QST article about converting the Radio Shack
> fm antenna into a 2m beam? I would like to get a copy of it, if someone
> could scan it and e-mail it to me. Thanks, Rob WB8VWI
Thanks everyone for the responses!! I have a copy and I will try it out.
Rob WB8VWI

3410. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:27:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e15d1_8@corp.newsgroups.com>
Source record: 89331

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>Hitler, Mao, and Stalin all supported strict gun control laws.
>
> Bush, Arrafat, the Columbian Drug Lords and Ossama do not.

Richard, if your wife/mother/sister/daughter were being raped
and you could stop it with a gun, what would you do? Lay down
the gun and initiate touchy-feely negotiations with the rapist?
--
73, Cecil, W5DXP

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3411. Re: carolina windom vs dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:30:58 UTC
From: Thierry <http>
Message-ID: <414e16d4@news.vo.lu>
Source record: 89332

"Cecil Moore" <w5dxp@hotmail.com> wrote in message
news:414e13ff$1_8@corp.newsgroups.com...
> Thierry wrote:
> > it is well what i though, but in my case this is a Carolina Windom like
on
> > this drawing
> > http://www.astrosurf.com/lombry/Radio/ant-carolina-windom-dwg.gif
> >
> > The balun is attached to the wire and there is no segment above it. the
coax
> > enter the balun and the otehr side goes to the TX
> > hence my question. And is this design still a Carolina Windom, ...?
>
> Good Grief! No, that is *NOT* a Carolina Windom, which is an antenna
> sold by Radio Works. Hopefully, they have it copyrighted and therefore
> can object to the above BS. See it at
>
> http://www.radioworks.com/ccwcover.html
>
> The antenna you mention is simply an off-center-fed dipole, not really
> a Windom at all. (Why are people with 65 IQ's allowed to build web pages?)

the 65 IQ has nothing to do with it. The problem is that the manufacturer
sold it as a Windom...
and it is as it is off center fed... with a simple balun and coax, but the
opposite is not true.
Ok it is not a carolina, it 's only me who mixed both designs.

73
Thierry

> --
> 73, Cecil, W5DXP
>
>
> -----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
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3412. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:33:37 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <lHo3d.23080$fC7.6851@newssvr29.news.prodigy.com>
Source record: 89333

>>> We speak English, not an adaptation
>>> of it
>>
>>
>> I beg to differ!

>> Americans speak American and we speak English ... 'nuff said!
>>
>> Peter, G3PHO

'Corse, IF you know MORSE (both American and Continental), you would
realize that the Ham "HI" is a contraction from the MORSE for "HEE"
.... .. from .... . . ! As is much of morse! Like e s for "and",
the origination for that was the AMERICAN MORSE sign for the symbol "&" !
And much more shorthand in it from a time that messages were charged for
by the LETTER, or WORD ! and for your info, two shortest messages were
(from a correspondant wanting to know about the sale of his book/article,)
sent the message "?" (without the quotes)! The reply (from the publisher)
was "!" (again without the quotes)!! As info, Jim NN7K

3413. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:40:53 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <adCdnRJlv591hdPcRVn-oA@comcast.com>
Source record: 89334

> Radio is regulated because the airwaves belong to the pubic.

And because they are a very finite resource.

>Use of a radio for survival (of life or property I will add) is not
>regulated in any way.

Specifically and unconditionally permitted by the FCC.

3414. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:47:42 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e1aa1$1_8@corp.newsgroups.com>
Source record: 89336

Richard Clark wrote:
> Let's see, you cannot catch a kid walking out with a 3 foot assault
> rifle every day of the week for a year (we will skip holidays and
> weekends when they are more diligent). Yeah, right, that's how it
> happened! Shoplifters every day for a year and no one notices it at
> the till, or in the records, or in the stock room.

You are shooting your own argument in the foot. The people you are describing are *LAW-BREAKERS*, not law-abiders. There are already laws against what they are doing. They already broke the law and you want yet another law for them to break??? Why not advocate enforcing the existing laws which are not being properly enforced? How many laws do they have to break before you realize that law-breakers don't obey laws? As I said before, you might as well be advocating laws prohibiting hurricanes from hitting Florida.

Gun control laws don't keep guns out of the hands of criminals.
Gun control laws keep guns out of the hands of law-abiding people who need guns to defend themselves against criminals. You and the criminals would like to see all law-abiding citizens disarmed and helpless.

In case you missed it: LAW-BREAKERS don't obey laws. They don't obey the present laws and they won't obey any new laws that you are advocating.
To keep the thread on topic: IMO, you can't see the forest for the trees.
--
73, Cecil, W5DXP

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3415. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:48:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5g6sk0h8rkrmupi9p5bt9fg4h2bti1qe6q@4ax.com>
Source record: 89337

On Sun, 19 Sep 2004 19:01:16 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>Gee what kind of idiots do you grow in Seattle?

Hi Jack,

This is the gun crowd you are speaking of.

73's
Richard Clark, KB7QHC

3416. Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:49:11 UTC
From: Radio Man <puns@verizon.net>
Message-ID: <XVo3d.473$C8.256@trnddc05>
Source record: 89335

Is there a means of testing a 9:1 or 10:1 balun to make
sure it is the correct impeadance before connecting it to
an antenna or tuner?

3417. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:52:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3d6sk0hpknk4mj24325rs7uueicl9h315p@4ax.com>
Source record: 89338

On Sun, 19 Sep 2004 18:27:10 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:
>what would you do?
You still lamenting about Dukakis losing in '98?

3418. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:54:03 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <v_o3d.6956$n16.3831@newsread2.news.atl.earthlink.net>
Source record: 89339

"Radio Man" <puns@verizon.net> wrote in message
news:XVo3d.473$C8.256@trnddc05...
> Is there a means of testing a 9:1 or 10:1 balun to make
> sure it is the correct impeadance before connecting it to
> an antenna or tuner?
>
If at a low frequency , put a resistor across the high impedance of the balun equal to the design impedance and check the swr. Frequency does not really have anything to do with it, just it is sometimes hard to get a resistor that is not reactive and is acting like a resistor at the higher frequencies.

Build 2 of the baluns and connect them back to back and put a 50 ohm dummy load on the second one, assuming you are going from 50 ohms to the 450 or 500 ohm impedance unbalanced. Then measuer the swr.

3419. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-19 23:55:53 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <d0p3d.17512$QJ3.9328@newssvr21.news.prodigy.com>
Source record: 89340

Radio Man wrote:

> Is there a means of testing a 9:1 or 10:1 balun to make
> sure it is the correct impeadance before connecting it to
> an antenna or tuner?

Couple ways-- Requires non inductive resistor -- If have a
MFJ-259 (ect) or a Noise bridge, connect your resistor to the X9
output side of the balun, connect the input side of the balun
to the MFJ, and sweep the frequencies, -- the meter should
stay FLAT, at 1:1 (or close to it) over the range it is designed for.
or, the noise bridge noise level should remain unchanged (same consider
ation). or, (this requires a POWER, NON-inductive resistor),
with a SWR bridge, XMIT into it (again on various freqs)!!
SWR should be flat over the range you want to use! Jim NN7K

3420. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 00:02:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b77sk0tsekafvtetjsc2uha2ok4qpa7int@4ax.com>
Source record: 89341

On Sun, 19 Sep 2004 23:33:37 GMT, "NN7Kex(NOSPAM)k7zfg"
<"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net> wrote:

> two shortest messages were
>(from a correspondant wanting to know about the sale of his book/article,)
>sent the message "?" (without the quotes)! The reply (from the publisher)
>was "!" (again without the quotes)!

Hi Jim,

Dumas.

73's
Richard Clark, KB7QHC

3421. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 00:08:28 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e1f80_8@corp.newsgroups.com>
Source record: 89342

Bob Miller wrote:
> Jack, please explain why we need battlefield weapons in a civilian
> society.

That's simple. Because the criminals are armed with battlefield
weapons. Don't know about you, but I think it's stupid to take
my 66 year-old fists to a gunfight.

> How many times do you need to shoot that beautiful deer before you
> drag it to the sausage maker?

Deer don't shoot back. Criminals, including terrorists do, and
sometimes with fully automatic weapons. The criminals obviously
want the ordinary citizens to be disarmed. But why should you
want exactly the same thing as the criminals?

Did you know that the crime rate is falling in the concealed-carry
states? Did you know that a majority of states are concealed-carry
states? If you were a criminal, would you really want to take on
someone who might be packin' a concealed Colt .45?
--
73, Cecil, W5DXP

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3422. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 00:09:27 UTC
From: "Careful..." <s833oiudf7@Hotmail.com>
Message-ID: <414e1fbb@post.usenet.com>
Source record: 89343

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Clark"
> Hi Jack,

Don't say 'Hi Jack' within 3 miles of an airport these days...

-=-=-=

3423. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 00:17:09 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e2188$1_8@corp.newsgroups.com>
Source record: 89344

Richard Clark wrote:

> Cecil Moore <w5dxp@hotmail.com> wrote:
>>what would you do?
>
> You still lamenting about Dukakis losing in '98?

Worse than that. I'm lamenting about every Libertarian
presidential candidate losing every single year.

How are your non-weapon negotiations coming with that
250 pound guy in the process of raping your daughter?
--
73, Cecil, W5DXP

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3424. Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 00:19:53 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cil7n8ags1@hercules.btinternet.com>
Source record: 89345

"Bill Turner" wrote
> The voltage at the ends of a half wave dipole can reach thousands of
> volts even with relatively low power. Trees have been set on fire with
> as low as 100 watts. Be careful!
>
==========
Hi Bill,

A half-wave dipole is a resonant tuned circuit.

A 40 meter dipole using 14-gauge wire has a Q of about 11.

At 100 watts there is 85 volts at the feedpoint.

The voltage between the ends of the antenna is 85 times Q which equals 956 volts.

Therefore, the voltage between one end of the antenna and ground is only 478 volts.

And this falls to a much lower value when the end of the wire is in contact with anything by virtue of the very high antenna impedance of around 1500 ohms.

Furthermore, the antenna is immediately detuned when it comes into contact with anything and Tx power falls.

From where do you get your "thousands of volts" - the old wive's monthly magazines?

There are far more Californian forest fires caused by arsonists than 100 watt transmitters. Fortunately, it doesn't seem to have a bad effect on the quality of the wine.

Reg, G4FGQ

3425. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 00:22:43 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10ks8m220bcdn10@corp.supernews.com>
Source record: 89346

I will deal with only one of the misconceptions.

Actual assault weapons have been tightly regulated (in many States, civilians can not legally own them at all) by the Nation Firearms Act (NFA) for the past about 70 years. Very, very few crimes have been committed with such weapons.

The law that just expired contained a definition that was equivalent to defining the number pi as 3. It defined rifles with certain cosmetic features as being what they could not be - "assault weapons." The law used emotive words to make it appear that common rifles were the same as what had been dealt with by the very old NFA. Even the media showed police owned machine guns (regulated by the NFA) firing and then left the impression that those were the rifles covered by the just expired law.

In short: the law that just expired was a fraud - assault weapons continue, as they have for 70 or so years, to be very tightly regulated.

Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

3426. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 01:08:47 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <414E2D9D.3000106@ix.netcom.com>
Source record: 89347

> "If a dipole falls in a forest and there's no one there to hear it,
> does it make a sound?"
>

No, but makes a lot of QRM... ;-)

3427. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 01:17:01 UTC
From: Robert Casey <wa2ise@ix.netcom.com>
Message-ID: <414E2F82.1010302@ix.netcom.com>
Source record: 89348

>
> I assure you we are concentrating very carfefully, Reg! Last week we had
> about 20,000 gun laws on the books, counting all federal and state laws.
> This weekend we have one less federal gun law, and soon there may be less.
> When free people use their minds instead of letting foolish emotions be
> their guide, the concept of restricting firearms from law abiding citizens
> is one of the first things to go.
>

Gun control is using both hands.

In any event, if the trees are at all flammable, best use some
non conducting rope (that won't absorb moisture when it rains)
to support the ends of the antenna away from the tree limbs.
The antenna would work better without those lossy tree trunks
right next to the ends anyway.

3428. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 01:36:10 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e340e$1_3@corp.newsgroups.com>
Source record: 89349

Reg Edwards wrote:
> From where do you get your "thousands of volts" - the old wive's monthly
> magazines?

Try this, Reg. A dipole is a standing-wave antenna. Most people know
that the voltage 1/4WL away from a current maximum is pretty high.
Since the current is zero at the end of the dipole, all the energy
is contained in the E-field. So what is the voltage when all the
energy is in the E-field?

A 1/2WL dipole is a lot like a lossy piece of 600 ohm transmission
line. 600 ohms is in the ballpark of the natural Z0 of a dipole if
there were no reflections on it, i.e. if it were terminated such
that reflections were eliminated thus turning it into a traveling-
wave antenna.

If one assumes that at the dipole feedpoint, (VF+VR)/(IF+IR) = 50 ohms,
and if the traveling-wave impedance of a dipole is 600 ohms, one can
calculate the ratio of VR to VF. Turns out to be about 0.9. So VF is
about ten times the feedpoint voltage. At the open-circuit at the end
of a dipole, VF adds in phase with VR so the voltage at the open-circuit
end of the dipole is about 20 times the feedpoint voltage.

The feedpoint voltage at 100W is about 70.7V. Therefore, the voltage
at the ends of the dipole is about 1414V RMS. Multiply by 2.8 to get
peak to peak at about 4kv.

When I worked for Schlumberger in the oil fields, we could easily
draw a 4 inch arc if someone got their aluminum hard hat too close
to the mobile radio whip during transmit. How much voltage does it
take to draw a 4 inch arc?
--
73, Cecil, W5DXP

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3429. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 01:49:40 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <20dsk0d4crhvsohtmo1eiicsvfdpchrp8v@4ax.com>
Source record: 89350

On Sun, 19 Sep 2004 19:08:28 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>Bob Miller wrote:
>> Jack, please explain why we need battlefield weapons in a civilian
>> society.
>
>That's simple. Because the criminals are armed with battlefield
>weapons. Don't know about you, but I think it's stupid to take
>my 66 year-old fists to a gunfight.
>
>> How many times do you need to shoot that beautiful deer before you
>> drag it to the sausage maker?
>
>Deer don't shoot back. Criminals, including terrorists do, and
>sometimes with fully automatic weapons. The criminals obviously
>want the ordinary citizens to be disarmed. But why should you
>want exactly the same thing as the criminals?
>
>Did you know that the crime rate is falling in the concealed-carry
>states? Did you know that a majority of states are concealed-carry
>states?

I wonder if those same states might also have the highest number of
crimes of passion committed with firearms? Don't know, just asking.

> If you were a criminal, would you really want to take on
>someone who might be packin' a concealed Colt .45?

Personally, I wouldn't attack someone packing a cap pistol. But if
your argument is carried to its conclusion, that law abiding citizens
should have guns as big as what the worst criminals carry, then we'd
all be walking around with machine guns. That's fine, until somebody
loses his/her temper.

One of the staples of San Antonio TV news is showing some family on
the South Side mourning the death of yet another kid killed in a
drive-by or whatever -- happens about two or three times a month.

Bob
k5qwg

3430. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 01:56:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <t2esk0dqeamtndi3u6c1sfetnjmi5mrghb@4ax.com>
Source record: 89351

On Sun, 19 Sep 2004 19:17:09 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:
>Worse than that. I'm lamenting about every Libertarian
>presidential candidate losing every single year.
You lament too much.

3431. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 01:59:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u7esk05vhnchr3qttlspq9ihdqsvpedoqh@4ax.com>
Source record: 89352

On Sun, 19 Sep 2004 18:47:42 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:
>To keep the thread on topic: IMO, you can't see the forest for the trees.
And how many trees do you have? Got any strange fruit?

3432. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 02:05:23 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <414e3ae3$0$91009$39cecf19@news.twtelecom.net>
Source record: 89353

Bob Miller wrote:
>
> Personally, I wouldn't attack someone packing a cap pistol. But if
> your argument is carried to its conclusion, that law abiding citizens
> should have guns as big as what the worst criminals carry, then we'd
> all be walking around with machine guns. That's fine, until somebody
> loses his/her temper.
>
> One of the staples of San Antonio TV news is showing some family on
> the South Side mourning the death of yet another kid killed in a
> drive-by or whatever -- happens about two or three times a month.
>
> Bob
> k5qwg
>
>

Seems to me there is a big difference between people losing their tempers, and drive by shootings by gang members, such as the fact that normal citizens don't lose their tempers and shoot strangers. If you think they do, show me some evidence.

tom
K0TAR

3433. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 02:30:30 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <6vr122-836.ln1@p400bob.lse.com.au>
Source record: 89354

Dont know how useful this would be but it might be worthwhile measuring
the RF power on the input and output side of the balun in the back to
back exercise. That will give you an idea of loss and as you increase
power, saturation.

Cheers Bob VK2YQA

> Build 2 of the baluns and connect them back to back and put a 50 ohm dummy
> load on the second one, assuming you are going from 50 ohms to the 450 or
> 500 ohm impedance unbalanced. Then measuer the swr.
>
>
>

3434. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 03:12:56 UTC
From: Knarf <ve6cb@NOSPAM.telus.net>
Message-ID: <YUr3d.87017$XP3.74335@edtnps84>
Source record: 89355

Hi Richard:

I don't want to attract any more spam. But am trying an experiment with MailWasher. My ISP (Telus) has a very effective spam filter, and very little gets through, but I turned it off as I wanted to see if bouncing spam would stop it. I have been going now for three months and do not see much change. Averaging about 33 spam messages a day. I plan to run the experiment till the end of the year or so.

What bothers me is how much of this junk eats bandwidth up, and would like to find a way to eliminate it. I have known many people who end up getting so much spam that they dump their address and get a new one. I was wondering if these spammers continue to send spam for ever to non-existent addresses.

Had an e-mail from a local ham who says he was very successful with MailWasher, so will give him a call and see if I am doing something wrong.

73, Frank Meredith
(VE6CB)

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ab9rk0talvb1gr8pnr7qbvb4gmbic38r5u@4ax.com...
> On Sun, 19 Sep 2004 10:39:15 GMT, "Knarf" <ve6cb@NOSPAM.telus.net>
> wrote:
> >Just checking to see if I can post with a "Munged" e-mail address to
> >minimize spam. Also an alias, with my name backwards, is supposed to cut
> >down on the probability of such junk.
>
> Hi Frank,
>
> This is dreaming in technicolor and surround-sound. I post with my
> full name and address in the clear and as a consequence never "see" as
> much as one spam in a month. Certainly my filters kill up to 10 a
> day, but as I said, I don't "see" them - takes all of two or three
> seconds to automagically wipe them out on start up or take them out
> like a bug-zapper when they straggle in.
>
> I get far more spam on my business account with my address registered
> with government agencies. I have to add one or two new spammers to my
> kill file there each week and that currently outnumbers my killfile
> here 7:1. The spam that I do see here isn't even addressed to me.
>
> 73's
> Richard Clark, KB7QHC

3435. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 03:27:01 UTC
From: Cecil Moore <w5dxp@hotmail.com>
Message-ID: <414e4e0a_7@corp.newsgroups.com>
Source record: 89356

Bob Miller wrote:
> One of the staples of San Antonio TV news is showing some family on
> the South Side mourning the death of yet another kid killed in a
> drive-by or whatever -- happens about two or three times a month.

If laws can stop crime, why haven't the laws against drive-by
shootings stopped the drive-by shootings?
--
73, Cecil, W5DXP

-----= Posted via Newsfeeds.Com, Uncensored Usenet News =-----
http://www.newsfeeds.com - The #1 Newsgroup Service in the World!
-----== Over 100,000 Newsgroups - 19 Different Servers! =-----

3436. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 04:28:31 UTC
From: David Ryeburn <ryeburn@sfu.caz>
Message-ID: <ryeburn-A08E45.21283119092004@morgoth.sfu.ca>
Source record: 89357

In article <v_o3d.6956$n16.3831@newsread2.news.atl.earthlink.net>,
"Ralph Mowery" <rmowery28146@earthlink.net> wrote:

> If at a low frequency , put a resistor across the high impedance of the
> balun equal to the design impedance and check the swr. Frequency does not
> really have anything to do with it, just it is sometimes hard to get a
> resistor that is not reactive and is acting like a resistor at the higher
> frequencies.

That should work fine.

> Build 2 of the baluns and connect them back to back and put a 50 ohm dummy
> load on the second one, assuming you are going from 50 ohms to the 450 or
> 500 ohm impedance unbalanced. Then measuer the swr.

That won't work. Let's say the balun is supposed to be 9 to 1 but is
actually 25 to 1, and the second balun, likewise supposed to be 9 to 1,
is also 25 to 1. The balun on the output side will transform 50 ohms not
to 450 ohms but to 1250 ohms. Then the one on the input side will
transform that 1250 ohms back down to 50 ohms.

David, ex-W8EZE

--
David Ryeburn
ryeburn@sfu.caz
To send e-mail, use "ca" instead of "caz".

3437. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 05:19:00 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ifpsk01qf8e64gs1bdqcb4t4m9ecbiql24@4ax.com>
Source record: 89358

On Mon, 20 Sep 2004 03:12:56 GMT, "Knarf" <ve6cb@NOSPAM.telus.net>
wrote:

>What bothers me is how much of this junk eats bandwidth up, and would like
>to find a way to eliminate it.

Hi Frank,

Simple: Encrypted email with public keys, or private keys to verify
sender/recipient. The technology has been available for years (PGP),
and the RSA algorithms are public domain now (and have been for a
couple of years). It would kill the industry overnight just like the
"don't call" list instituted last year. The problem is inertia, and
Micro$oft wanting to do it their way (as if they had a clue about
network security).

73's
Richard Clark, KB7QHC

3438. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 05:52:14 UTC
From: richardharrison@webtv.net
Message-ID: <28304-414E700E-132@storefull-3253.bay.webtv.net>
Source record: 89359

Mark wrote:
"Is this practical?"

Trees near an antenna cause some loss. It`s hard to quantify in advance, but in ww-2, the signal corps estimated that hf loss is usually negligible if horizontal polarization is used (page 241 of 'electrical communications engineering').

I`ve found that horizontal HF dipoles, directly fed by coax in various Bolivian Chaco Jungle sites, below the the tree canopy, but not too close to the trees, communicated well with Cochabamba and La Paz, Bolivia. So, the dipoles didn`t suffer too much from the trees. The Signal Corps was right.

Best regards, Richard Harrison, KB5WZI

3439. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 06:56:22 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <o2vsk0p7iolhha0al93v26q1kad9p4mkgb@4ax.com>
Source record: 89360

En Richard Clark va escriure en Fri, 17 Sep 2004 18:41:36 GMT:

>On Fri, 17 Sep 2004 13:20:22 +0200, ********** wrote:

>>Am scratching my head what to do, if there is no noise bridge....

Hi Richard,

>Build one: 4 resistors, Zener diode, battery.

That is the easy part, the not so easy is that AFAIK you need a
(mediumly good) transformer to get the signal from the noise
bridge to a receiver without altering the bridge.

I had thought about building a simple bridge, but ferrite cores
are close to impossible to get in Barcelona (Spain). You get them
but with no info at all, just size and color. If you ask anything
else the shop person will look at you as a trouble-maker.

Appart from that, I have finally found the schematics of my
receiver. Some low-pas and diode limiter and strait to the gate
of a fet. This explains the "not exactly 50 ohms" thing.

73's

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3440. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 08:50:33 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cim5kp$1f$1@titan.btinternet.com>
Source record: 89361

Dear Cec,

Like Brer Rabbit - I'm saying nuffin.

Reg

3441. Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 10:28:46 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040920062846.933$I8_-_@newsreader.com>
Source record: 89362

Steveo <moparholic@hotmail-nospam.com> wrote:
> keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
> > news:<c034bd2.0409191810.45fc9bc2@posting.google.com>...
> > > Hey, Psychiatrist to keyclowns. thanks for your post on keyclownism
> > > now I understand what motivates these guys and why they act the way
> > > they do. It is always fun to watch them kind of like animals in the
> > > zoo or hamsters in a cage. I have a pet keyclown his name is Twisty
> > > and he wont obey commands, wont make sense, stirs up the other
> > > keyclowns, etc. Is there some special book I Should read to
> > > understand Twisty?
> > >
> > > Thanks again.
> >
> > You are welcome. See, people?
> >
> That's priceless! You're talking to yourself and handing out Psychiatric
> advice. Did your court ordered shrink teach you that trick?
>
> COUNT PARTY DESCRIPTION ABBREV.
> 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS F4
>
> Defendant to seek mental health counseling
>
> Pursuant to the request of probation a capias is ordered
> issued. Bond is set at $5,000.00 no 10%.
>
> Probation as ordered by this Court on April 11, 1997 is
> ordered continued with the following added conditions: 1)
> Seek and maintain gainful employment; 2) Defendant to seek
> mental health counseling; 3) Execute wage withholding
> agreement.
>
> JUDGE JAMES D. JENSEN
> PARTY : D1 - ADAIR DOUGLAS W
> 12/5/2000 1 Title : EVT:JE FILE/JOUR $ THRU9/23/03
> SENTENCE C-184-502
> PARTY : D1 - ADAIR DOUGLAS W
> 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
> terminated unsuccesfully
> PARTY : D1 - ADAIR DOUGLAS W

3442. Felon N8WWM Doug Adair has a court ordered Psychiatrist

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 12:32:35 UTC
From: zerobeatradio@yahoo.com
Message-ID: <c80b2ab0.0409200432.70b78f02@posting.google.com>
Source record: 89363

WOW! Thanks for the heads-up! That's the same felonious loser that hawks antenna's under the guise of "superskyhooks".

http://tinyurl.com/3nxlt

N8WWM Doug Adair.

What a loser!

Steveo <moparholic@hotmail-nospam.com> wrote:
> keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
> > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
> > > Hey, Psychiatrist to keyclowns. thanks for your post on keyclownism
> > > now I understand what motivates these guys and why they act the way
> > > they do. It is always fun to watch them kind of like animals in the
> > > zoo or hamsters in a cage. I have a pet keyclown his name is Twisty
> > > and he wont obey commands, wont make sense, stirs up the other
> > > keyclowns, etc. Is there some special book I Should read to
> > > understand Twisty?
> > >
> > > Thanks again.
> >
> > You are welcome. See, people?
> >
> That's priceless! You're talking to yourself and handing out Psychiatric
> advice. Did your court ordered shrink teach you that trick?
>
> COUNT PARTY DESCRIPTION ABBREV.
> 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS F4
>
> Defendant to seek mental health counseling
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> Pursuant to the request of probation a capias is ordered
> issued. Bond is set at $5,000.00 no 10%.
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> ordered continued with the following added conditions: 1)
> Seek and maintain gainful employment; 2) Defendant to seek
> mental health counseling; 3) Execute wage withholding
> agreement.
>
> JUDGE JAMES D. JENSEN
> PARTY : D1 - ADAIR DOUGLAS W
> 12/5/2000 1 Title : EVT:JE FILE/JOUR $ THRU9/23/03

> SENTENCE C-184-502
> PARTY : D1 - ADAIR DOUGLAS W
> 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
> terminated unsuccesfully
> PARTY : D1 - ADAIR DOUGLAS W

3443. Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 12:40:01 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040920084001.068$l3@newsreader.com>
Source record: 89364

Yep, that's the same crook. Doug Adair (N8WWM)

btw..your url link for his antenna scam didn't work. Here it is:

http://www.geocities.com/nutsboutantennas/6_meter_wire.html

zerobeatradio@yahoo.com (zerobeat) wrote:
> WOW! Thanks for the heads-up! That's the same felonious loser that hawks
> antenna's under the guise of "superskyhooks".
>
> http://tinyurl.com/3nxlt
>
> N8WWM Doug Adair.
>
> What a loser!
>
> Steveo <moparholic@hotmail-nospam.com> wrote:
> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
> > > > Hey, Psychiatrist to keyclowns. thanks for your post on keyclownism
> > > > now I understand what motivates these guys and why they act the way
> > > > they do. It is always fun to watch them kind of like animals in the
> > > > zoo or hamsters in a cage. I have a pet keyclown his name is Twisty
> > > > and he wont obey commands, wont make sense, stirs up the other
> > > > keyclowns, etc. Is there some special book I Should read to
> > > > understand Twisty?
> > > >
> > > > Thanks again.
> > >
> > > You are welcome. See, people?
> > >
> > That's priceless! You're talking to yourself and handing out
> > Psychiatric advice. Did your court ordered shrink teach you that trick?
> >
> > COUNT PARTY DESCRIPTION ABBREV.
> > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS F4
> >
> > Defendant to seek mental health counseling
> >
> > Pursuant to the request of probation a capias is ordered
> > issued. Bond is set at $5,000.00 no 10%.
> >
> > Probation as ordered by this Court on April 11, 1997 is
> > ordered continued with the following added conditions: 1)

> > Seek and maintain gainful employment; 2) Defendant to seek
> > mental health counseling; 3) Execute wage withholding
> > agreement.
> >
> > JUDGE JAMES D. JENSEN
> > PARTY : D1 - ADAIR DOUGLAS W
> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $ THRU9/23/03
> > SENTENCE C-184-502
> > PARTY : D1 - ADAIR DOUGLAS W
> > 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
> > terminated unsuccesfully
> > PARTY : D1 - ADAIR DOUGLAS W

3444. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 12:45:26 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <GhA3d.35$cN6.15@lakeread02>
Source record: 89365

"Richard Harrison" <richardharrison@webtv.net> wrote
> Mark wrote:
> "Is this practical?"
>
> Trees near an antenna cause some loss. It`s hard to quantify in advance,
> but in ww-2, the signal corps estimated that hf loss is usually
> negligible if horizontal polarization is used (page 241 of 'electrical
> communications engineering').
>
> I`ve found that horizontal HF dipoles, directly fed by coax in various
> Bolivian Chaco Jungle sites, below the the tree canopy, but not too
> close to the trees, communicated well with Cochabamba and La Paz,
> Bolivia. So, the dipoles didn`t suffer too much from the trees. The
> Signal Corps was right.
>
> Best regards, Richard Harrison, KB5WZI
>

Hi Richard, it's not easy to compare your rainforest canopy to loblolly pines, but at approximately 50' my dipole is well below the pine canopy, and well surrounded by them. If there is an impact from the pine trees it would be hard to quantify since the dipole exceeds everyone's expectations for short and long range performance. We have heard comments that pine-fron clusters when wet, affect a near field, but that has not been our experience. Neither does snow, ice or winds. Overall, there appears to be no effect on the antenna being in fairly close proximity to many tall trees, and suspended from them.

Best regards,

Jack

3445. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 12:59:42 UTC
From: Dale Parfitt <par@parelectronics.com>
Message-ID: <2vA3d.5511$vd1.4190@trnddc03>
Source record: 89366

"David Ryeburn" <ryeburn@sfu.caz> wrote in message
news:ryeburn-A08E45.21283119092004@morgoth.sfu.ca...
> In article <v_o3d.6956$n16.3831@newsread2.news.atl.earthlink.net>,
> "Ralph Mowery" <rmowery28146@earthlink.net> wrote:
>
> > If at a low frequency , put a resistor across the high impedance of the
> > balun equal to the design impedance and check the swr. Frequency does
not
> > really have anything to do with it, just it is sometimes hard to get a
> > resistor that is not reactive and is acting like a resistor at the
higher
> > frequencies.
>
> That should work fine.
>
> > Build 2 of the baluns and connect them back to back and put a 50 ohm
dummy
> > load on the second one, assuming you are going from 50 ohms to the 450
or
> > 500 ohm impedance unbalanced. Then measuer the swr.
>
> That won't work. Let's say the balun is supposed to be 9 to 1 but is
> actually 25 to 1, and the second balun, likewise supposed to be 9 to 1,
> is also 25 to 1. The balun on the output side will transform 50 ohms not
> to 450 ohms but to 1250 ohms. Then the one on the input side will
> transform that 1250 ohms back down to 50 ohms.
>
> David, ex-W8EZE
>
>As long as the 2 baluns have the same transformation ratio (i.e. 9:1,
25:1) this is perfectly valid test. The same test is used with a network
analyzer to determine insertion loss- the final loss is 1/2 of the measured
loss of the 2 in series.

Dale W4OP

3446. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 13:30:07 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <CXA3d.36$cN6.24@lakeread02>
Source record: 89367

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote

Jack Painter <223bthp@cox.net> writes
> >In fact, there are few countries, and Britain is definitely not one of
them,
> >that teach or speak proper English. It is a language butchered in
> >pronounciation by all that England influenced, and was only corrected in
> >teaching and pronounciation in America. We speak English, not an
adaptation
> >of it. If your understanding of this fact is lacking, there are many
places
> >for you to correct your deficiency, but it will not be here.
> >
> >73,
> >
> >Jack
>
> There ain't no word 'pronounciation' - even in American.
> Ian.
> --
>

A product of your country's public school system , eh?

Jack

3447. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 14:35:45 UTC
From: richardharrison@webtv.net
Message-ID: <28304-414EEAC1-186@storefull-3253.bay.webtv.net>
Source record: 89368

Jack Painter wrote:
"Overall, there appears to be no effect on the antenna being in fairly close proximity to many tall trees, and suspended from them."

That was the Signal Corps conclusion for horizontal polarization at HF. For vertical polarization, surrounding trees are better energy absorbers. At VHF and UHF, absorption gets worse and worse as frequency goes up. Too much foliage is impenetrable at VHF and UHF, regardless of polarization, humidity, ice, snow and wind.

The Signal Corps advises trying horizontal HF antennas among the trees to avoid detection by the enemy.

Best regards, Richard Harrison, KB5WZI

3448. Re: 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 15:06:28 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <UIC3d.31109$ci3.948808@twister.southeast.rr.com>
Source record: 89369

"Alex" <no@spam.com> wrote in message
news:8m4ek01mduc4fvn1omj205o1707684um37@4ax.com...
> On 14 Sep 2004 12:38:36 GMT, fractenna@aol.com (Fractenna) wrote:
> >Also, Why are you using PVC? This stuff is horrible as a base substrate
at 2.4
> >GHz.
>
> Because I can get a cheap PVC case which is otherwise suitabel for
> weatherproofing the antenna. And because I have seen reported (I have
> not tried it myself) that such material does not get heated in a
> microwave oven.
You should try this yourself. I think you will be surprised.

3449. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 15:08:23 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <uZJlYrAnJvTBFwy2@g3ohx.demon.co.uk>
Source record: 89370

In message <CXA3d.36$cN6.24@lakeread02>, Jack Painter <223bthp@cox.net>
writes
>
>"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote
>
> Jack Painter <223bthp@cox.net> writes
>> >In fact, there are few countries, and Britain is definitely not one of
>them,
>> >that teach or speak proper English. It is a language butchered in
>> >pronounciation by all that England influenced, and was only corrected in
>> >teaching and pronounciation in America. We speak English, not an
>adaptation
>> >of it. If your understanding of this fact is lacking, there are many
>places
>> >for you to correct your deficiency, but it will not be here.
>> >
>> >73,
>> >
>> >Jack
>>
>> There ain't no word 'pronounciation' - even in American.
>> Ian.
>> --
>>
>
>A product of your country's public school system , eh?
>
>Jack
>
>

No.... I just know how to spell and pronounce words correctly (it's a
gift, I tell you!). 'Pronunciation' is one of the most frequently
mispronounced words.

At least our public schools are a bit classier than the American public
schools (because they don't let the public in). However, I doubt if many
of their inmates pronounce 'pronunciation' correctly.
Ian.
--

3450. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 15:24:54 UTC
From: richardharrison@webtv.net
Message-ID: <28304-414EF646-191@storefull-3253.bay.webtv.net>
Source record: 89271

Toni wrote:
"This explains the "not exactly 50 ohms" thing."

The FET input resistance is high and a shunt diode probably has high impedance at low signals.

The antenna appears as a generator at its resonant frequency with an internal resistance equal to its radiation resistance. As frequency lowers, so does radiation resistance. The antenna`s series capacitive reactance rises rapidly too. Due to lower antenna loading, a high receiver input impedance does better with a too-short antenna than does a 50-ohm input. But high-impedance input may be more susceptible to interference and overload.

Maximum power transfer to a receiver occurs when there is a conjugate match between the antenna and its receiver. This may, however, not give the best noise performance.

Best regards, Richard Harrison, KB5WZI

3451. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 15:38:52 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <m4utk01u22d2rlnjsfpnm0hq7kf49lvd6p@4ax.com>
Source record: 89272

On Sun, 19 Sep 2004 21:05:23 -0500, Tom Ring <news0000@taring.org>
wrote:

>Bob Miller wrote:
>>
>> Personally, I wouldn't attack someone packing a cap pistol. But if
>> your argument is carried to its conclusion, that law abiding citizens
>> should have guns as big as what the worst criminals carry, then we'd
>> all be walking around with machine guns. That's fine, until somebody
>> loses his/her temper.
>>
>> One of the staples of San Antonio TV news is showing some family on
>> the South Side mourning the death of yet another kid killed in a
>> drive-by or whatever -- happens about two or three times a month.
>>
>> Bob
>> k5qwg
>>
>>
>
>Seems to me there is a big difference between people losing their
>tempers, and drive by shootings by gang members, such as the fact that
>normal citizens don't lose their tempers and shoot strangers.

> If you
>think they do, show me some evidence.

Five shootings on the local TV news last night. Normal, reasonable
law-abiding people getting mad and shooting both friends and strangers
over trifle matters.

Bob
k5qwg

>
>tom
>K0TAR

3452. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 15:44:24 UTC
From: "aunwin@insightbb.com"
Message-ID: <sVC3d.126735$3l3.16279@attbi_s03>
Source record: 89273

I had not thought of the losses that can occur in terms of db I wonder what
sort of losses occur due to the use of baluns?
Art

"Bob Bob" <bcnntp@optusnet.com.au> wrote in message
news:6vr122-836.ln1@p400bob.lse.com.au...
> Dont know how useful this would be but it might be worthwhile measuring
> the RF power on the input and output side of the balun in the back to
> back exercise. That will give you an idea of loss and as you increase
> power, saturation.
>
> Cheers Bob VK2YQA
>
>
>
> > Build 2 of the baluns and connect them back to back and put a 50 ohm
dummy
> > load on the second one, assuming you are going from 50 ohms to the 450
or
> > 500 ohm impedance unbalanced. Then measuer the swr.
> >
> >
> >

3453. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 15:58:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f5vtk0hcd9eephs5k25i2ulj51c50vtvqm@4ax.com>
Source record: 89274

On Mon, 20 Sep 2004 12:59:42 GMT, "Dale Parfitt"
<par@parelectronics.com> wrote:

>>As long as the 2 baluns have the same transformation ratio (i.e. 9:1,
>>25:1)
> this is perfectly valid test.

Hi Dale,

I think David's point was that you can prove symmetry through the back
to back test, but you don't "know" what it is symmetrical about. Was
that 9:1's we were testing, or the 25:1's?

I can imagine a 25:1 transformer, but I sure haven't seen the
configuration for a 25:1 BalUn - that has to be one nasty mess of
connections staged across several compound BalUns.

73's
Richard Clark, KB7QHC

3454. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:00:40 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2r8da8F175h8lU1@uni-berlin.de>
Source record: 89276

You omitted a comma.

ITYM, "However, I doubt if many
of their inmates pronounce, 'pronunciation' correctly.".

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
news:uZJlYrAnJvTBFwy2@g3ohx.demon.co.uk...
> However, I doubt if many
> of their inmates pronounce 'pronunciation' correctly.

3455. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:02:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cjvtk09jg160jk316b7ikhvclfaq9bopob@4ax.com>
Source record: 89275

On Sun, 19 Sep 2004 20:36:10 -0500, Cecil Moore <w5dxp@hotmail.com>
wrote:

>How much voltage does it
>take to draw a 4 inch arc?
2 or 3 volts certainly, depends on the conductivity of the skull
beneath the tin hat.

3456. Re: 4nec2 simulation of a pvc sheet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:04:02 UTC
From: fractenna@aol.com
Message-ID: <20040920120402.29600.00001013@mb-m29.aol.com>
Source record: 89277

>> Because I can get a cheap PVC case which is otherwise suitabel for
>> weatherproofing the antenna. And because I have seen reported (I have
>> not tried it myself) that such material does not get heated in a
>> microwave oven.

This is a good, first-order test. But, as warned, different pvc manu's give different results. It wasn't made for s-band RF. You must test it thoroughly without extrapolating. Some is almost OK; others are really poor. Sure ain't kidex.

73,
Chip N1IR

3457. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:09:57 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10ku0a6gsjcf577@corp.supernews.com>
Source record: 89278

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:cjvtk09jg160jk316b7ikhvclfaq9bopob@4ax.com...
> On Sun, 19 Sep 2004 20:36:10 -0500, Cecil Moore <w5dxp@hotmail.com>
> wrote:
>
> >How much voltage does it
> >take to draw a 4 inch arc?
> 2 or 3 volts certainly, depends on the conductivity of the skull
> beneath the tin hat.
It'll take a bit more to make the voices stop.

3458. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:20:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <650uk09c4qb5asl7k57lh6juv2aebsqeai@4ax.com>
Source record: 89279

On Mon, 20 Sep 2004 08:56:22 +0200, Toni <post_to_usenet@hotmail.com>
wrote:
>>Build one: 4 resistors, Zener diode, battery.
>
>That is the easy part, the not so easy is that AFAIK you need a
>(mediumly good) transformer to get the signal from the noise
>bridge to a receiver without altering the bridge.

Hi Toni,

Not necessary, but not impossible either. We will proceed as if you
do need one.

>I had thought about building a simple bridge, but ferrite cores
>are close to impossible to get in Barcelona (Spain). You get them
>but with no info at all, just size and color.

Then those have a high chance of being Powdered Iron core. Wrong
cores.

Find a swap meet where old computers are being offered, especially old
cables. Look for those power or video connectors that have a plastic
cylinder at one end, 1 or 2 cm near the actual connector. Cut away
the plastic, cut away the wires: you have a high chance that you are
holding a ferrite core that will work.

>Appart from that, I have finally found the schematics of my
>receiver. Some low-pas and diode limiter and strait to the gate
>of a fet. This explains the "not exactly 50 ohms" thing.

But it doesn't tell you what Z it IS.

73's
Richard Clark, KB7QHC

3459. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:49:55 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <6GMQP+DzowTBFwhv@g3ohx.demon.co.uk>
Source record: 89280

No I didn't. Why would you want to put a comma between the verb and the
object? Absolute twaddle!
And stop top posting!
Ian.

In message <2r8da8F175h8lU1@uni-berlin.de>, Airy R. Bean
<me@privacy.net> writes
>You omitted a comma.
>
>ITYM, "However, I doubt if many
> of their inmates pronounce, 'pronunciation' correctly.".
>
>"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
>news:uZJlYrAnJvTBFwy2@g3ohx.demon.co.uk...
>> However, I doubt if many
>> of their inmates pronounce 'pronunciation' correctly.
>
>

--

3460. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 16:55:41 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <414f08f4.29650124@news.blueyonder.co.uk>
Source record: 89281

On Sun, 19 Sep 2004 09:15:22 -0700, Bill Turner <noway@nohow.com>
wrote:

>Reg has obviously never drawn an arc from the end of a dipole running
>100 watts. I assure you it is indeed possible to set a tree on fire, as
>at least one ham I know of proved a few years back. We residents of
>Southern California (the brush fire capital of the world) are keenly
>aware of how little it takes to get a fire going.

I once set the grass on my lawn on fire (it hadn't been trimmed for
ages!) by having the lower end of the centre vertical of a Bobtail
Curtain array a little too near the ground! Only 100 watts or so used
then ....
Yes, the grass was dry enough as we hadn't had rain for months (I was
living in NZ at the time).

Peter, G3PHO

3461. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 17:06:28 UTC
From: Karl Beckman <Karl.Beckman@motorola.com>
Message-ID: <cin2mlkcv1@engnntp1.cig.mot.com>
Source record: 89285

No, it's quite simple. If the turns ratio is 5:1, then the Z ratio is 25:1.

--
Karl Beckman, P.E.

"Quality is never an accident, it is always the result of high
intention, sincere effort, intelligent direction and skillful
execution; it represents the wise choice of many alternatives"

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:f5vtk0hcd9eephs5k25i2ulj51c50vtvqm@4ax.com...
> On Mon, 20 Sep 2004 12:59:42 GMT, "Dale Parfitt"
> <par@parelectronics.com> wrote:
>
> >>As long as the 2 baluns have the same transformation ratio (i.e. 9:1,
> >>25:1)
> > this is perfectly valid test.
>
> Hi Dale,
>
> I think David's point was that you can prove symmetry through the back
> to back test, but you don't "know" what it is symmetrical about. Was
> that 9:1's we were testing, or the 25:1's?
>
> I can imagine a 25:1 transformer, but I sure haven't seen the
> configuration for a 25:1 BalUn - that has to be one nasty mess of
> connections staged across several compound BalUns.
>
> 73's
> Richard Clark, KB7QHC

3462. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 17:12:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <931uk01i60rdlb22f9p1qa2ndbeu4fs9sm@4ax.com>
Source record: 89282

On Mon, 20 Sep 2004 17:00:40 +0100, "Airy R. Bean" <me@privacy.net>
wrote:
>You omitted a comma.
>ITYM, "However, I doubt if many of their inmates pronounce, 'pronunciation' correctly.".
This addition suffers from the misapplication of a comma as a
substitute for the pause in speech - that, or it is entirely out of
place. Either way its addition is in error. The redundant period at
the end is also in error. The comma after the ITYM is awkward at
best.

Hi OM,

The "however" is set off from the rest of the sentence because it is a
transitional adverb. Contemporary usage would allow it to stand or
not be used since the sentence is short. By adding the second comma,
you render " I doubt if many of their inmates pronounce" as a
non-restrictive clause. This means that its absence would not alter
the sense of the sentence. This is obviously not the case above.

73's
Richard Clark, KB7QHC

3463. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 17:21:37 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <2ZednQLUdM7gjNLcRVn-rg@comcast.com>
Source record: 89283

In some ways, it's a pity that english is becoming the world language.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3464. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 17:31:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9i4uk01u1s6i35m31412uii0jb5gh1uq4s@4ax.com>
Source record: 89284

On Mon, 20 Sep 2004 12:21:37 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:
>In some ways, it's a pity that english is becoming the world language.

Hi Dave,

The greater pity will come when it is not, and a nation of English
speaking Americans are the step-and-fetchits working for the Chinese
as waiters, launderers or field slaves. Coming as soon as Nov. 2.

73's
Richard Clark, KB7QHC

3465. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:03:43 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <10ku6s3a41eou52@corp.supernews.com>
Source record: 89286

k4wge wrote:
> "Antennas for Light" <as98p3u4hq8@Hotmail.com> wrote in message
news:<414e1530@post.usenet.com>...
>
>>**** Post for FREE via your newsreader at post.usenet.com ****
>>
>>WASHINGTON (Reuters) -- Researchers ... have invented an antenna that
>>captures visible light in much the same way that radio antennas capture
>>radio waves. ...tiny carbon nanotubes...
>>
>><snip>
>>
>>http://edition.cnn.com/2004/TECH/science/09/17/light.antenna.reut/index.html
>
>
>
> This antenna was invented much earlier, actually, as the compound eye
> of insects and other arthropods.
>
> http://biodidac.bio.uottawa.ca/thumbnails/filedet.htm?File_name=ARTH003B&File_type=GIF

Oh, honestly. Real antennas have been used at optical frequencies for a
decade. There's a current DARPA BAA on just this topic--for uncooled
infrared imagers. My day job involves trying to use this effect for optical
interconnection in servers and routers.

Cheers,

Phil Hobbs

3466. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:05:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cin658$oo3$1@sparta.btinternet.com>
Source record: 89287

```
> "Quality is never an accident, it is always the result of high
> intention, sincere effort, intelligent direction and skillful
> execution; it represents the wise choice of many alternatives"
>
> ----------------------------------------------------
```

What's Quality ?

3467. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:06:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7s6uk0diaisb40vikqun7nuahe9srg7b0g@4ax.com>
Source record: 89288

On Mon, 20 Sep 2004 13:06:28 -0400, "Karl Beckman"
<Karl.Beckman@motorola.com> wrote:

>No, it's quite simple. If the turns ratio is 5:1, then the Z ratio is 25:1.

Hi Karl,

As I said, I can imagine a conventional transformer - but you are not
describing a BalUn.

73's
Richard Clark, KB7QHC

3468. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:09:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uv6uk09c2b7hu0ncjfkioj3emfg2b354le@4ax.com>
Source record: 89289

On Mon, 20 Sep 2004 14:03:43 -0400, Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com> wrote:
>There's a current DARPA BAA on just this topic

Hi Phil,

I must've missed that (probably because they don't offer BAAs to SBA
set-asides).

Do you have a link to this BAA?

73's
Richard Clark, KB7QHC

3469. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:22:41 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2r8ltvF17kdi2U1@uni-berlin.de>
Source record: 89290

You put a comma before a quote.

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
news:6GMQP+DzowTBFwhv@g3ohx.demon.co.uk...
> No I didn't. Why would you want to put a comma between the verb and the
> object? Absolute twaddle!
> And stop top posting!
> Ian.
>
> In message <2r8da8F175h8lU1@uni-berlin.de>, Airy R. Bean
> <me@privacy.net> writes
> >You omitted a comma.
> >
> >ITYM, "However, I doubt if many
> > of their inmates pronounce, 'pronunciation' correctly.".
> >
> >"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in
message
> >news:uZJlYrAnJvTBFwy2@g3ohx.demon.co.uk...
> >> However, I doubt if many
> >> of their inmates pronounce 'pronunciation' correctly.
> >
> >
>
> --
>

3470. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:26:54 UTC
From: "Airy R. Bean" <me@privacy.net>
Message-ID: <2r8lu7F17kdi2U2@uni-berlin.de>
Source record: 89291

It is not a pause in speech. It is correct grammar.

Also, the comma after, "ITYM" is equally as correct grammar.
Both introduce the quoted text.

The full stop, not a, "period" for English-speakers, at the end
of the sentence is not redundant. It marked the end of my sentence.

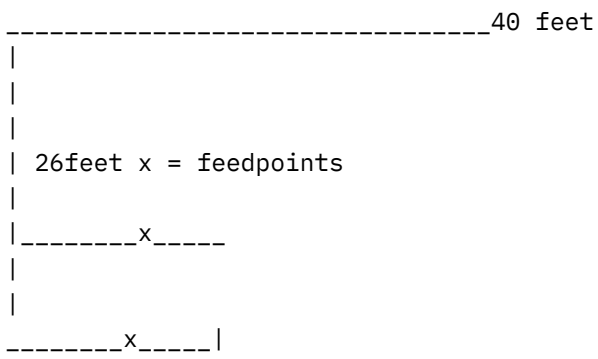
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:931uk01i60rdlb22f9p1qa2ndbeu4fs9sm@4ax.com...
> On Mon, 20 Sep 2004 17:00:40 +0100, "Airy R. Bean" <me@privacy.net>
> wrote:
> >You omitted a comma.
> >ITYM, "However, I doubt if many of their inmates pronounce,
'pronunciation' correctly.".
> This addition suffers from the misapplication of a comma as a
> substitute for the pause in speech - that, or it is entirely out of
> place. Either way its addition is in error. The redundant period at
> the end is also in error. The comma after the ITYM is awkward at
> best.
>
> Hi OM,
>
> The "however" is set off from the rest of the sentence because it is a
> transitional adverb. Contemporary usage would allow it to stand or
> not be used since the sentence is short. By adding the second comma,
> you render " I doubt if many of their inmates pronounce" as a
> non-restrictive clause. This means that its absence would not alter
> the sense of the sentence. This is obviously not the case above.
>
> 73's
> Richard Clark, KB7QHC

3471. J Pole for 40

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:35:04 UTC
From: Richard <nearlynews_email@ntlworld.com>
Message-ID: <2r8m3iF1709nrU1@uni-berlin.de>
Source record: 89292

Say you have an half-wave, end fed antenna that is layed out as an inverted L, 26 feet vertical, 40 feet horizontal. Can you convert this 40 metre EFHWA into a J pole by running the J part near the ground?

ie



3472. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:41:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <at8uk05i5046jpg0ur59tct6v1oc2v1re2@4ax.com>
Source record: 89293

On Mon, 20 Sep 2004 19:26:54 +0100, "Airy R. Bean" <me@privacy.net>
wrote:

>It is not a pause in speech. It is correct grammar.
>
>Also, the comma after, "ITYM" is equally as correct grammar.
>Both introduce the quoted text.
>
>The full stop, not a, "period" for English-speakers, at the end
>of the sentence is not redundant. It marked the end of my sentence.
>

Hi OM,

All presumptions.

73's
Richard Clark, KB7QHC

3473. Re: Where to locate low pass filters

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 18:45:56 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <719uk0puk17lj613rlb24oot1ebjorag1l@4ax.com>
Source record: 89294

On Sat, 18 Sep 2004 19:24:31 -0700, Tod Glenn <webmaster@cordite.com>
wrote:

>In article <20040917210945.15036.00003538@mb-m02.aol.com>,
> k9sqg@aol.com (K9SQG) wrote:
>
>> The best place is at the output of the transmitter or linear amplifier.
>
>Thanks all who answered.
>
>Tod

When I've used a low-pass filter, I've simply attached it to the
output of the transceiver with a double male coax connector, so the
unwanted higher harmonics go directly into the filter, and then the
hopefully clean signal moves on to the antenna feedline.

bob
k5qwg

3474. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 19:33:06 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <r9adnTOCUMHTrdLcRVn-iw@comcast.com>
Source record: 89295

> The greater pity will come when it is not, and a nation of English
> speaking Americans are the step-and-fetchits working for the Chinese
> as waiters, launderers or field slaves. Coming as soon as Nov. 2.
>
> 73's
> Richard Clark, KB7QHC

While I have no trouble believing that someone is working twoard this, you might remember what we were told about how Russia was working to take over here.. Turned out that they were being told that we were trying to take them over, and they were doing what they thought they had to do for self defence..

I've been there, and they are by and large, "guys like us".

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3475. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 19:44:06 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <aqG3d.40$cN6.35@lakeread02>
Source record: 89296

"Bob Miller" <rmiller47@satx.rr.com> wrote

Tom Ring <news0000@taring.org> wrote:
> >Seems to me there is a big difference between people losing their
> >tempers, and drive by shootings by gang members, such as the fact that
> >normal citizens don't lose their tempers and shoot strangers.
> > If you
> >think they do, show me some evidence.
>
> Five shootings on the local TV news last night. Normal, reasonable
> law-abiding people getting mad and shooting both friends and strangers
> over trifle matters.
>
> Bob
> k5qwg

Hi Bob, let me help you understand what "show me some evidence" means:

Quote the stories with URLs so that we can decide for ourselves whether or not these drug-dealing gang-banging criminal history numbnuts meet the standard of "Normal, reasonable law-abiding people" or not.

This was the anti-gun creeps biggest claim, that Americans all shoot each other over an argument. It's a bunch of crap and anyone who spreads it is too. But when you want to start trotting out the lies you've been fed I will gladly show you where each one has been debunked. At the end of the day, you are either going to be out of bunk or just go away. Either one is fine.

Jack

3476. Re: J Pole for 40

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 19:55:45 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <5BG3d.12870$n%3.1126376@twister.southeast.rr.com>
Source record: 89301

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:2r8m3iF1709nrU1@uni-berlin.de...
> Say you have an half-wave, end fed antenna that is layed out as an
inverted
> L, 26 feet vertical, 40 feet horizontal. Can you convert this 40 metre
EFHWA
> into a J pole by running the J part near the ground?
>
> ie
>
>
> _____________________________40 feet
> |
> |
> |
> | 26feet x = feedpoints
> |
> |________x_____
> |
> |
> ________x_____|
>
I think you would be better off with a different antenna all together. A 1/4
wl antenna with the full length mounted vertically would probably be better
than this 1/2 wl antenna. Or center feed the horizontal section and and let
the ends hang down 13ft. An inverted V may fit in your 40 ft of space.I am
assuming you have a space problem.

3477. Help Needed - Climbing Belt

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 19:56:10 UTC
From: aa5qt@aol.com
Message-ID: <20040920155610.04552.00002699@mb-m27.aol.com>
Source record: 89297

Does anyone have a climbing belt they would loan me for a few days? I need to make a trip up the tower, and can't find mine! And being retired, I'd rather not make another purchase. I've tried the local rental companies, but no one has one.

I'm located near Granbury, Texas, but could certainly pay postage, etc.

73, Gary K5QT

3478. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 19:56:40 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <p8p322-k0f.ln1@p400bob.lse.com.au>
Source record: 89299

I guess you could say that once they saturate magnetically more power
from that point on will be a loss <grin>

Resistive wire losses as well. ie the balun gets hot (Altho saturation
also leads to temperature rise)

I am not that knowledible of baluns but note that the number of turns is
a compromise of sorts. The Xl is suppose to be some multiple of the Zo
and Zi (10x I think is a good number) Too high a number of turns and it
saturates at a lower power, too low and resistive losses become a factor..

I am prepared to be shot down on this.. I learn as I need to!. ie When I
need a balun I'll read up on them...!

Cheers Bob VK2YQA

aunwin@insightbb.com wrote:
> I had not thought of the losses that can occur in terms of db I wonder what
> sort of losses occur due to the use of baluns?
> Art
>

3479. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 20:04:33 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <Vk07HcGRfzTBFw3k@g3ohx.demon.co.uk>
Source record: 89298

A comma essentially indicates a pause - and there certainly wasn't any
pause in this case.
Is you native language German or Dutch? I think that you might be more
correct in those languages.
Anyway, this is getting boring, and is seriously off-topic, so I'm going
to shut up and think sweet thoughts about antennas.
Ian.

In message <2r8ltvF17kdi2U1@uni-berlin.de>, Airy R. Bean
<me@privacy.net> writes
>You put a comma before a quote.
>
>"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
>news:6GMQP+DzowTBFwhv@g3ohx.demon.co.uk...
>> No I didn't. Why would you want to put a comma between the verb and the
>> object? Absolute twaddle!
>> And stop top posting!
>> Ian.
>>
>> In message <2r8da8F175h8lU1@uni-berlin.de>, Airy R. Bean
>> <me@privacy.net> writes
>> >You omitted a comma.
>> >
>> >ITYM, "However, I doubt if many
>> > of their inmates pronounce, 'pronunciation' correctly.".
>> >
>> >"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in
>message
>> >news:uZJlYrAnJvTBFwy2@g3ohx.demon.co.uk...
>> >> However, I doubt if many
>> >> of their inmates pronounce 'pronunciation' correctly.
>> >
>> >
>>
>> --
>>
>
>

--

3480. Re: J Pole for 40

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 20:12:24 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <IQG3d.12872$n%3.1128826@twister.southeast.rr.com>
Source record: 89300

"Richard" <nearlynews_email@ntlworld.com> wrote in message
news:2r8m3iF1709nrU1@uni-berlin.de...
> Say you have an half-wave, end fed antenna that is layed out as an
inverted
> L, 26 feet vertical, 40 feet horizontal. Can you convert this 40 metre
EFHWA
> into a J pole by running the J part near the ground?
>
> ie
>
>
> _____________________________40 feet
> |
> |
> |
> | 26feet x = feedpoints
> |
> |________x_____
> |
> |
> ________x_____|
>
My guess is that the input impedance of this antena is on the order of a few
hundred ohms as compared to the input impedance of a normal J poles
"radiating section" which would be a few thousand. A balun may be the better
way to go.

3481. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 21:22:05 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <3dhuk0t6s77duar107hf191m50k6fbo67g@4ax.com>
Source record: 89302

On Mon, 20 Sep 2004 15:44:06 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Bob Miller" <rmiller47@satx.rr.com> wrote
>
> Tom Ring <news0000@taring.org> wrote:
>> >Seems to me there is a big difference between people losing their
>> >tempers, and drive by shootings by gang members, such as the fact that
>> >normal citizens don't lose their tempers and shoot strangers.
>> > If you
>> >think they do, show me some evidence.
>>
>> Five shootings on the local TV news last night. Normal, reasonable
>> law-abiding people getting mad and shooting both friends and strangers
>> over trifle matters.
>>
>> Bob
>> k5qwg
>
>Hi Bob, let me help you understand what "show me some evidence" means:
>
>Quote the stories with URLs so that we can decide for ourselves whether or
>not these drug-dealing gang-banging criminal history numbnuts meet the
>standard of "Normal, reasonable law-abiding people" or not.
>
>This was the anti-gun creeps biggest claim, that Americans all shoot each
>other over an argument. It's a bunch of crap and anyone who spreads it is
>too. But when you want to start trotting out the lies you've been fed I will
>gladly show you where each one has been debunked. At the end of the day, you
>are either going to be out of bunk or just go away.

Jack, if you go here while these stories are up http://www.woai.com/
see for yourself: a domestic argument that ends up with one guy dead,
one lady with a bullet in her neck.

Another guy shot, playing basketball. Another shot in an alley.

Typical Sunday in this town.

I ain't "trotting out lies." Just observing life.

Have fun.

Bob
k5qwg

> Either one is fine.
>
>Jack
>
>

3482. Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 21:25:10 UTC
From: zerobeatradio@yahoo.com
Message-ID: <c80b2ab0.0409201325.250276ba@posting.google.com>
Source record: 89303

Steveo <moparholic@hotmail-nospam.com> wrote in message
news:<20040920084001.068$l3@newsreader.com>...
> Yep, that's the same crook. Doug Adair (N8WWM)
>
> btw..your url link for his antenna scam didn't work. Here it is:
>
> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
>
> zerobeatradio@yahoo.com (zerobeat) wrote:
> > WOW! Thanks for the heads-up! That's the same felonious loser that hawks
> > antenna's under the guise of "superskyhooks".
> >
> > http://tinyurl.com/3nxlt
> >
> > N8WWM Doug Adair.
> >
> > What a loser!
> >
> > Steveo <moparholic@hotmail-nospam.com> wrote:
> > > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
> > > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
> > > > > Hey, Psychiatrist to keyclowns. thanks for your post on keyclownism
> > > > > now I understand what motivates these guys and why they act the way
> > > > > they do. It is always fun to watch them kind of like animals in the
> > > > > zoo or hamsters in a cage. I have a pet keyclown his name is Twisty
> > > > > and he wont obey commands, wont make sense, stirs up the other
> > > > > keyclowns, etc. Is there some special book I Should read to
> > > > > understand Twisty?
> > > > >
> > > > > Thanks again.
> > > >
> > > > You are welcome. See, people?
> > > >
> > > That's priceless! You're talking to yourself and handing out
> > > Psychiatric advice. Did your court ordered shrink teach you that trick?
> > >
> > > COUNT PARTY DESCRIPTION ABBREV.
> > > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS F4
> > >
> > > Defendant to seek mental health counseling
> > >
> > > Pursuant to the request of probation a capias is ordered
> > > issued. Bond is set at $5,000.00 no 10%.

> > >
> > > Probation as ordered by this Court on April 11, 1997 is
> > > ordered continued with the following added conditions: 1)
> > > Seek and maintain gainful employment; 2) Defendant to seek
> > > mental health counseling; 3) Execute wage withholding
> > > agreement.
> > >
> > > JUDGE JAMES D. JENSEN
> > > PARTY : D1 - ADAIR DOUGLAS W
> > > 12/5/2000 1 Title : EVT:JE FILE/JOUR $ THRU9/23/03
> > > SENTENCE C-184-502
> > > PARTY : D1 - ADAIR DOUGLAS W
> > > 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
> > > terminated unsuccesfully
> > > PARTY : D1 - ADAIR DOUGLAS W
>
>
I found out
that he's also living with a felon who has lost her CPA license due
to tax fraud. (details below) Man, this N8WWM guy has real issues!

KC8QJP Lee Kathleen <---- her address is the same as N8WWM on QRZ.com

http://acc.ohio.gov/dhearing.html
http://acc.ohio.gov/bdmn0401.html
FORMAL DISCIPLINARY HEARING-KATHLEEN R. LEE
Chairman Woods noted that Kathleen Lee was issued CPA certificate 36,525
on July 15, 1998. The hearing was to consider disciplinary action
against Ms. Lee's CPA certificate pursuant to Ohio Revised Code section
4701.16(A)(5), conviction of a felony under the laws of any state or of
the United States. Ms. Lee was convicted in the United States District
Court, Northern District of Ohio of five counts of Aiding & Assisting in
Filing False Tax Returns, a violation of 26 USC 7206(2), on June 12,
2000. Ms. Lee did not appear at the hearing. The Board agreed to
deliberate the disciplinary action in a later executive session.
Action taken.
Kathleen R. Lee, CPA 4701.16(A)(5)-Convicted of aiding & assisting in
filing of false tax returns. CPA certificate revoked.

3483. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 23:26:33 UTC
From: Dogs - nothing but dogs!! <L986v54wsyt@Hotmail.com>
Message-ID: <414f6732@post.usenet.com>
Source record: 89304

**** Post for FREE via your newsreader at post.usenet.com ****

"k4wge"
> This antenna was invented much earlier, actually,
> as the compound eye of insects and other arthropods.
>
http://biodidac.bio.uottawa.ca/thumbnails/filedet.htm?File_name=ARTH003B&File_type=GIF

Googled your proposed connection:
"An ommatidium contains a cluster of *photoreceptor* cells..."

I believe that you've missed the point. It's the difference between optics
and EM (*), or between nerves and conductors, or between biology and
physics.

(* Yes, I know, I know...)

-=-=-=

3484. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 23:42:46 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <414f6af7$0$74186$39cecf19@news.twtelecom.net>
Source record: 89305

Bob Miller wrote:
> On Sun, 19 Sep 2004 21:05:23 -0500, Tom Ring <news0000@taring.org>
> wrote:
>
>
>>Bob Miller wrote:
>>
>>>Personally, I wouldn't attack someone packing a cap pistol. But if
>>>your argument is carried to its conclusion, that law abiding citizens
>>>should have guns as big as what the worst criminals carry, then we'd
>>>all be walking around with machine guns. That's fine, until somebody
>>>loses his/her temper.
>>>
>>>One of the staples of San Antonio TV news is showing some family on
>>>the South Side mourning the death of yet another kid killed in a
>>>drive-by or whatever -- happens about two or three times a month.
>>>
>>>Bob
>>>k5qwg
>>>
>>>
>>
>>Seems to me there is a big difference between people losing their
>>tempers, and drive by shootings by gang members, such as the fact that
>>normal citizens don't lose their tempers and shoot strangers.
>
>
>> If you
>>think they do, show me some evidence.
>
>
> Five shootings on the local TV news last night. Normal, reasonable
> law-abiding people getting mad and shooting both friends and strangers
> over trifle matters.
>
> Bob
> k5qwg
>
>
>>tom
>>K0TAR
>
>

Ok. I'd love to see details on it. I find it hard to believe, since I've never seen an area of the country with a murder rate like that. Got any newspaper links where I can read about them?

I will have to make one exception on my previous staement - about 6 days ago a guy stabbed to death 3 people here in Minneapolis. I have, with tongue not too firmly in cheek, suggested we need to investigate knife control legislation.

TIA
tom
K0TAR

3485. Re: Available power from an RF field

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 23:46:23 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <10kuqukg60hs96c@corp.supernews.com>
Source record: 89306

Steve Nosko wrote:
> Sheeesh ! "Fourier Analysis of the universe". Now that's HEAVY!
>
> I'll take a pass...
> Steve
>
> "Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
> news:cicvuv$ft9$1@hercules.btinternet.com...
>
>>Anything which repeats itself is amenable to Fourier Analysis.
>>
>>If there's a once-only event then Heaviside's Operational Calculus is
>>appropriate.
>>
>>It's not more difficult. It's just a matter of getting used to it.
>>
>>==========
>>
>>"Richard Harrison" wrote -
>> Cecil, W5DXP wrote:
>>
>>>"You don`t really think that our present Big Bang was the first one
>>>ever, do you?"
>>
>>
>
>
No! Fourier analysis of the universe could improve the S/N ratio of
Usenet--get all the cranks to go away until they've evaluated the integrals....

Cheers,

Phil Hobbs

3486. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-20 23:52:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6tquk0tb20d9n9rgrdu9mfkmaol26qh8j1@4ax.com>
Source record: 89307

On Mon, 20 Sep 2004 20:26:33 -0300, "Dogs - nothing but dogs!!"
<L986v54wsyt@Hotmail.com> wrote:
>I believe that you've missed the point. It's the difference between optics
>and EM (*), or between nerves and conductors, or between biology and
>physics.

Hi OM,

What's the difference in Truro?

73's
Richard Clark, KB7QHC

3487. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 00:07:19 UTC
From: Phil Hobbs <pcdhSpamMeSenseless@us.ibm.com>
Message-ID: <10kus5se63dje60@corp.supernews.com>
Source record: 89308

Richard Clark wrote:
> On Mon, 20 Sep 2004 14:03:43 -0400, Phil Hobbs
> <pcdhSpamMeSenseless@us.ibm.com> wrote:
>
>>There's a current DARPA BAA on just this topic
>
>
> Hi Phil,
>
> I must've missed that (probably because they don't offer BAAs to SBA
> set-asides).
>
> Do you have a link to this BAA?
>
> 73's
> Richard Clark, KB7QHC

Sorry, it's a bit older than I thought:
http://www.darpa.mil/baa/baa04-01.htm

Cheers,

Phil Hobbs

3488. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 00:19:08 UTC
From: Dogs - nothing but dogs!! <TruroSucks@Hotmail.com>
Message-ID: <414f7380@post.usenet.com>
Source record: 89309

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Clark"
> What's the difference...

I believe that insect eyes have little connection to the recent news about carbon nanotubes being arranged into 'antennas for light'. I think that the differences are quite clear.

The news is not BIG NEWS - quite the opposite... ;-)

> ...in Truro?

Truro? Puhleeze....couldn't stand it. Way too much traffic congestion for such a small town.

-=-=-=

3489. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 00:57:31 UTC
From: Dogs - nothing but dogs!! <P7667v68tviy65@Hotmail.com>
Message-ID: <414f7c7e@post.usenet.com>
Source record: 89310

**** Post for FREE via your newsreader at post.usenet.com ****

Ref:
http://edition.cnn.com/2004/TECH/science/09/17/light.antenna.reut/index.html

"Phil Hobbs"
> Sorry, it's a bit older than I thought:
> http://www.darpa.mil/baa/baa04-01.htm

I know it's natural to poo-poo all things new, but this NG takes the cake sometimes.

CNN, "Until now, no one had been able to make a device small enough to act as an antenna for [visible] light." ['visible' light is from the CNN article's lead paragraph]. Seems pretty clear that the news is the size. Other than scale, they've simply made some good ole' fashioned vertical monopoles.

That DARPA link (above) leads to 'blah, blah, blah' about millimetre wave and IR - not visible light. And they're looking for someone to invent same - it wasn't exactly a purchase order for an off-the-shelf product. And (apparently worth repeating) it wasn't for visible light scale.

If anyone can provide any 'old' news for actual 'EM' antennas for ~visible~ light, please post the link and be sure to alert Boston College(*) and CNN and DARPA. Insect eyes don't count (not even close) - not EM technology.

(* OMG - Let's quickly put any obvious fractal derivatives into the public domain here and now.)

-=-=-=

3490. Re: Balun Testing

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 01:07:35 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <X8L3d.182285$%n4.12519@bignews6.bellsouth.net>
Source record: 89311

>
> Couple ways-- Requires non inductive resistor -- If have a
> MFJ-259 (ect) or a Noise bridge, connect your resistor to the X9
> output side of the balun, connect the input side of the balun
> to the MFJ, and sweep the frequencies, -- the meter should
> stay FLAT, at 1:1 (or close to it) over the range it is designed for.
> SWR should be flat over the range you want to use! Jim NN7K

That's the way I have checked impedence transformers in the past.
I have found that a Variable resistor works pretty good for testing with a
MFJ-259.
Used it for half-wave coax baluns, as well as wind-it-yourself transformers.
Set the variable resistor to the expected value to match, then check it with
the MFJ-259,
it worked for me - on hf and 2-meters. Didn't try it on the uhf freqs.
I used to like to use 300-ohm twinlead because the weight didn't make the
dipole sag as much as coax.

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.766 / Virus Database: 513 - Release Date: 9/17/2004

3491. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 01:10:30 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <bcL3d.286350$Lj.34083@fed1read03>
Source record: 89312

"Bob Miller" <rmiller47@satx.rr.com> wrote

"Jack Painter" <223bthp@cox.net> wrote:
> >"Bob Miller" <rmiller47@satx.rr.com> wrote
> > Tom Ring <news0000@taring.org> wrote:
> >> >Seems to me there is a big difference between people losing their
> >> >tempers, and drive by shootings by gang members, such as the fact that
> >> >normal citizens don't lose their tempers and shoot strangers.
> >> > If you
> >> >think they do, show me some evidence.
> >>
> >> Five shootings on the local TV news last night. Normal, reasonable
> >> law-abiding people getting mad and shooting both friends and strangers
> >> over trifle matters.
> >>
> >> Bob
> >> k5qwg
> >
> >Hi Bob, let me help you understand what "show me some evidence" means:
> >
> >Quote the stories with URLs so that we can decide for ourselves whether
or
> >not these drug-dealing gang-banging criminal history numbnuts meet the
> >standard of "Normal, reasonable law-abiding people" or not.
> >
> >This was the anti-gun creeps biggest claim, that Americans all shoot each
> >other over an argument. It's a bunch of crap and anyone who spreads it is
> >too. But when you want to start trotting out the lies you've been fed I
will
> >gladly show you where each one has been debunked. At the end of the day,
you
> >are either going to be out of bunk or just go away.
>
> Jack, if you go here while these stories are up http://www.woai.com/
> see for yourself: a domestic argument that ends up with one guy dead,
> one lady with a bullet in her neck.
>
> Another guy shot, playing basketball. Another shot in an alley.
>
> Typical Sunday in this town.
>
> I ain't "trotting out lies." Just observing life.
>
> Have fun.

>
> Bob
> k5qwg
>
> > Either one is fine.
> >
> >Jack
> >

O.k. Bob, I'll be kind and say you are not trotting out lies, you're just delusional, because you imagine these are normal people, when every once of common sense you have tells you otherwise. And the news stories offer no details whatsoever, except the area of town (Lincolnshire on the east side). Suppose you mosey on over to that basketball court and tell us who plays there. If they ask you, tell them you're making sure they are just normal, reasonable law-abiding people, the kind that get mad and shoot both friends and strangers
over trifle matters because they had a gun. Drive bys are always gang related Bob, if you're not quick enough to understand that call your local police and ask about it. None of your stories (2 in all, not 5) are nornal law abiding citizens. Curb your enthusiams for sensational Dan Rather reporting and stick to facts next time so we have something to talk about, o.k.?

By the way, see your own link and read about the "Home Invasion Suspect Charged with Murder" in your nice neigborhood of ordinary law abiding folks.. Another homeowner dead, murdered in a home invasion while her elderly parents watched her shot to death, helpless to stop the 23 year old bastard kill her in front of them. Had they been armed, there would be a dead felon, not a dead daughter. Wish it was your daughter Bob? Want to watch her savagely beaten and shot to death in front of you? Plead with an insane killer for her life and then for yours? You bet you do Bob, you sorry wipe. You're happy that poor woman is dead and would sacrifice your own daughter too, rather than own a nasty gun and learn how to use it. No? Tell us where you differ on these fine points here Bob.

Have a nice evening.

Jack

3492. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 01:23:15 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <1b0vk0pg82kjbo914sc2e328kk1t709ile@4ax.com>
Source record: 89313

```
On Mon, 20 Sep 2004 21:10:30 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Bob Miller" <rmiller47@satx.rr.com> wrote
>
> "Jack Painter" <223bthp@cox.net> wrote:
>> >"Bob Miller" <rmiller47@satx.rr.com> wrote
>> > Tom Ring <news0000@taring.org> wrote:
>> >> >Seems to me there is a big difference between people losing their
>> >> >tempers, and drive by shootings by gang members, such as the fact that
>> >> >normal citizens don't lose their tempers and shoot strangers.
>> >> > If you
>> >> >think they do, show me some evidence.
>> >>
>> >> Five shootings on the local TV news last night. Normal, reasonable
>> >> law-abiding people getting mad and shooting both friends and strangers
>> >> over trifle matters.
>> >>
>> >> Bob
>> >> k5qwg
>> >
>> >Hi Bob, let me help you understand what "show me some evidence" means:
>> >
>> >Quote the stories with URLs so that we can decide for ourselves whether
>or
>> >not these drug-dealing gang-banging criminal history numbnuts meet the
>> >standard of "Normal, reasonable law-abiding people" or not.
>> >
>> >This was the anti-gun creeps biggest claim, that Americans all shoot each
>> >other over an argument. It's a bunch of crap and anyone who spreads it is
>> >too. But when you want to start trotting out the lies you've been fed I
>will
>> >gladly show you where each one has been debunked. At the end of the day,
>you
>> >are either going to be out of bunk or just go away.
>>
>> Jack, if you go here while these stories are up http://www.woai.com/
>> see for yourself: a domestic argument that ends up with one guy dead,
>> one lady with a bullet in her neck.
>>
>> Another guy shot, playing basketball. Another shot in an alley.
>>
>> Typical Sunday in this town.
```

>>
>> I ain't "trotting out lies." Just observing life.
>>
>> Have fun.
>>
>> Bob
>> k5qwg
>>
>> > Either one is fine.
>> >
>> >Jack
>> >
>
>O.k. Bob, I'll be kind and say you are not trotting out lies, you're just
>delusional, because you imagine these are normal people, when every once of
>common sense you have tells you otherwise. And the news stories offer no
>details whatsoever, except the area of town (Lincolnshire on the east side).
>Suppose you mosey on over to that basketball court and tell us who plays
>there. If they ask you, tell them you're making sure they are just normal,
>reasonable law-abiding people, the kind that get mad and shoot both friends
>and strangers
>over trifle matters because they had a gun. Drive bys are always gang
>related Bob, if you're not quick enough to understand that call your local
>police and ask about it. None of your stories (2 in all, not 5) are nornal
>law abiding citizens. Curb your enthusiams for sensational Dan Rather
>reporting and stick to facts next time so we have something to talk about,
>o.k.?
>
>By the way, see your own link and read about the "Home Invasion Suspect
>Charged with Murder" in your nice neigborhood of ordinary law abiding
>folks.. Another homeowner dead, murdered in a home invasion while her
>elderly parents watched her shot to death, helpless to stop the 23 year old
>bastard kill her in front of them. Had they been armed, there would be a
>dead felon, not a dead daughter. Wish it was your daughter Bob? Want to
>watch her savagely beaten and shot to death in front of you? Plead with an
>insane killer for her life and then for yours? You bet you do Bob, you sorry
>wipe. You're happy that poor woman is dead and would sacrifice your own
>daughter too, rather than own a nasty gun and learn how to use it. No? Tell
>us where you differ on these fine points here Bob.
>
>Have a nice evening.
>
>Jack
>

Jack, you certainly do get rude when someone is trying to have a civil
discussion with you.

Oh, well...

Have a good night,

Bob
k5qwg

3493. Any experiences with inverted L and elevated radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 01:57:51 UTC
From: k9sqg@aol.com
Message-ID: <20040920215751.08200.00000872@mb-m06.aol.com>
Source record: 89314

Just wonder if anybody out there has experimented and compared inverted L performance with elevated vs buried radials, particularly on 160 meters.

73s,

Evan

3494. Re: Good Antenna for Attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 02:01:31 UTC
From: Matt <nospam.hciss@yahoo.com>
Message-ID: <10kv2ppp7v54e34@corp.supernews.com>
Source record: 89315

If I would also like to listen to satellites flying over head which antenna would be better?

http://tinyurl.com/593dm

or this one?

http://tinyurl.com/4k794

I like the 2nd one(discone) slightly better since it will likely fit in my attic better and I can also use it as a TX antenna later on. I have heard they perform poorly though.

Matt

> Looking for a broadband scanner antenna for my attic. Would like 29-900Mhz
> receive and TX on 150 & 450Mhz ranges. TX is not that important really.
> Any suggestions?

3495. CB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 02:55:09 UTC
From: "campbell.nance" <campbell.nance@insightbb.com>
Message-ID: <hKM3d.20032$wV.4357@attbi_s54>
Source record: 89316

I am looking for a Spectrum antenna, specifically to pick up CB frequencies. I believe this is the Motorola brand of antennas. I have seen these before, but all the local Motorola dealers say they don't know about them. Any ideas?

Thanks

3496. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 03:16:04 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Z1N3d.286371$Lj.272535@fed1read03>
Source record: 89317

"Bob Miller" <rmiller47@satx.rr.com> wrote
> Jack, you certainly do get rude when someone is trying to have a civil
> discussion with you.
>
> Oh, well...
>
> Have a good night,
>
> Bob
> k5qwg

That was for effect Bob, nothing personal. It was intended to stir your senses a little bit, and current events in your own town today just helped me do it.

Take care of yourself,

Jack Painter
Virginia Beach VA

3497. Re: CB antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 03:53:13 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <JAN3d.231360$mD.101841@attbi_s02>
Source record: 89318

"campbell.nance" <campbell.nance@insightbb.com> wrote in message
news:hKM3d.20032$wV.4357@attbi_s54...
>I am looking for a Spectrum antenna, specifically to pick up CB
>frequencies.
> I believe this is the Motorola brand of antennas. I have seen these
> before,
> but all the local Motorola dealers say they don't know about them. Any
> ideas?
>
> Thanks
>
Are you referring to a mobile or fixed (base) antenna?

Motorola often purchased antennas from other OEM mfg. to their
specifications (e.g. Larsen or A/S for mobile antennas or dB for fixed VHF
antennas)

gb

3498. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 04:47:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mccvk0pa6v775l19d7ju6clm9aiu7obck2@4ax.com>
Source record: 89319

On Mon, 20 Sep 2004 20:07:19 -0400, Phil Hobbs
<pcdhSpamMeSenseless@us.ibm.com> wrote:

>Richard Clark wrote:
>> On Mon, 20 Sep 2004 14:03:43 -0400, Phil Hobbs
>> <pcdhSpamMeSenseless@us.ibm.com> wrote:
>>
>>>There's a current DARPA BAA on just this topic
>>
>>
>> Hi Phil,
>>
>> I must've missed that (probably because they don't offer BAAs to SBA
>> set-asides).
>>
>> Do you have a link to this BAA?
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Sorry, it's a bit older than I thought:
>http://www.darpa.mil/baa/baa04-01.htm
>
>Cheers,
>
>Phil Hobbs

Hi Phil,

Thanx. It looks like I was on the mark about lack of SBA set-asides,
but I have an appointment with the UW Nanotech group this week and it
will be a useful discussion point.

73's
Richard Clark, KB7QHC

3499. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 05:00:07 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <rzO3d.23842$t62.17186@newssvr29.news.prodigy.com>
Source record: 89221

Jack Painter wrote:
> "Bob Miller" <rmiller47@satx.rr.com> wrote
>
> "Jack Painter" <223bthp@cox.net> wrote:
>
>>>"Bob Miller" <rmiller47@satx.rr.com> wrote
>>>Tom Ring <news0000@taring.org> wrote:
>>>
>>>>>Seems to me there is a big difference between people losing their
>>>>>tempers, and drive by shootings by gang members, such as the fact that
>>>>>normal citizens don't lose their tempers and shoot strangers.
>>>>> If you
>>>>>think they do, show me some evidence.
>>>>
>>>>Five shootings on the local TV news last night. Normal, reasonable
>>>>law-abiding people getting mad and shooting both friends and strangers
>>>>over trifle matters.
>>>>
>>>>Bob
>>>>k5qwg
>>>
>>>Hi Bob, let me help you understand what "show me some evidence" means:
>>>
>>>Quote the stories with URLs so that we can decide for ourselves whether
>
> or
>
>>>not these drug-dealing gang-banging criminal history numbnuts meet the
>>>standard of "Normal, reasonable law-abiding people" or not.
>>>
>>>This was the anti-gun creeps biggest claim, that Americans all shoot each
>>>other over an argument. It's a bunch of crap and anyone who spreads it is
>>>too. But when you want to start trotting out the lies you've been fed I
>
> will
>
>>>gladly show you where each one has been debunked. At the end of the day,
>
> you
>
>>>are either going to be out of bunk or just go away.
>>
>>Jack, if you go here while these stories are up http://www.woai.com/
>>see for yourself: a domestic argument that ends up with one guy dead,

>>one lady with a bullet in her neck.
>>
>>Another guy shot, playing basketball. Another shot in an alley.
>>
>>Typical Sunday in this town.
>>
>>I ain't "trotting out lies." Just observing life.
>>
>>Have fun.
>>
>>Bob
>>k5qwg
>>
>>
>>>Either one is fine.
>>>
>>>Jack
>>>
>
>
> O.k. Bob, I'll be kind and say you are not trotting out lies, you're just
> delusional, because you imagine these are normal people, when every once of
> common sense you have tells you otherwise. And the news stories offer no
> details whatsoever, except the area of town (Lincolnshire on the east side).
> Suppose you mosey on over to that basketball court and tell us who plays
> there. If they ask you, tell them you're making sure they are just normal,
> reasonable law-abiding people, the kind that get mad and shoot both friends
> and strangers
> over trifle matters because they had a gun. Drive bys are always gang
> related Bob, if you're not quick enough to understand that call your local
> police and ask about it. None of your stories (2 in all, not 5) are nornal
> law abiding citizens. Curb your enthusiams for sensational Dan Rather
> reporting and stick to facts next time so we have something to talk about,
> o.k.?
>
> By the way, see your own link and read about the "Home Invasion Suspect
> Charged with Murder" in your nice neigborhood of ordinary law abiding
> folks.. Another homeowner dead, murdered in a home invasion while her
> elderly parents watched her shot to death, helpless to stop the 23 year old
> bastard kill her in front of them. Had they been armed, there would be a
> dead felon, not a dead daughter. Wish it was your daughter Bob? Want to
> watch her savagely beaten and shot to death in front of you? Plead with an
> insane killer for her life and then for yours? You bet you do Bob, you sorry
> wipe. You're happy that poor woman is dead and would sacrifice your own
> daughter too, rather than own a nasty gun and learn how to use it. No? Tell
> us where you differ on these fine points here Bob.
>
> Have a nice evening.
>
> Jack

>
>
This is the wrong place to fight the culture wars, Painter. The more the population grows in the U.S., the more pressure there will be on politicians to write more restrictive gun control legislation. If you don't like it, write your congressman. No one else can do anything about it.
Tom Donaly, KA6RUH

3500. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 05:00:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <10dvk05jaddhu9m3sfisko79jusbn3kvp8@4ax.com>
Source record: 89320

On Mon, 20 Sep 2004 21:19:08 -0300, "Dogs - nothing but dogs!!"
<TruroSucks@Hotmail.com> wrote:

>I believe that insect eyes have little connection to the recent news about
>carbon nanotubes being arranged into 'antennas for light'. I think that the
>differences are quite clear.

Hi OM,

Well, you said as much before without really saying anything. Beliefs
are simple to express, "what is different" is what I asked for. The
similarities outweigh the perceived differences.

More than two cars at an intersection is a traffic jam? If scale is
anything, this may be more your problem with antennas for light and mm
wave models at IR.

73's
Richard Clark, KB7QHC

3501. Re: Help Needed - Climbing Belt

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 05:19:56 UTC
From: George Kinzer <horseflygk@worldnet.att.net>
Message-ID: <0SO3d.615027$Gx4.582223@bgtnsc04-news.ops.worldnet.att.net>
Source record: 89222

http://www.altrec.com/published/climb/skills/makingyourownharness/

Outgoing mail is certified Virus Free. I like that.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.754 / Virus Database: 504 - Release Date: 9/7/2004

3502. Re: Any experiences with inverted L and elevated radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 07:23:30 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409202323.139a6fbc@posting.google.com>
Source record: 89223

k9sqg@aol.com (K9SQG) wrote in message
news:<20040920215751.08200.00000872@mb-m06.aol.com>...
> Just wonder if anybody out there has experimented and compared inverted L
> performance with elevated vs buried radials, particularly on 160 meters.
>
> 73s,
>
> Evan

You would need to get them fairly high off the ground to really do
well.
160 is no different from any other band as far as ground losses vs
height above ground. The height in wavelength and number of radials
for a certain degree of efficiency is pretty well cut and dry. In
order to use a fairly low number of elevated radials and have high
efficiency, you must have the antenna at least about a 1/4 wave high.
At a 1/4 wave up, about 10 or so radials will equal 120 on the ground.
But a 1/4 wave on 160m is 130 ft...:(
You only need about 3-4 radials at 1/2 wave up to do the same thing...
At around 1/8 wave up, you would need appx 60 radials to equal 120 on
the ground. And thats still 65 ft high at the base of the antenna...So
I'd scratch the elevated radials unless you have a tall tower to
support the vertical.
Unless you want a load of wires hiding the view of the sky, you would
be better off planting them on the ground. If you try using a low
number of them, and real low to the ground, like say 5-10 ft, the
efficiency will be pretty low. Almost as bad as no radials..:(MK

3503. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 07:42:18 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <q0kvk0136o1dtsit3qatfsafci7i3ni7r9@4ax.com>
Source record: 89224

Hi richard.

En Richard Clark va escriure en Mon, 20 Sep 2004 16:20:45 GMT:

>On Mon, 20 Sep 2004 08:56:22 +0200, Toni <post_to_usenet@hotmail.com>
>wrote:
>>>Build one: 4 resistors, Zener diode, battery.
>>
>>That is the easy part, the not so easy is that AFAIK you need a
>>(mediumly good) transformer to get the signal from the noise
>>bridge to a receiver without altering the bridge.
>
>Hi Toni,
>
>Not necessary, but not impossible either. We will proceed as if you
>do need one.
>
>>I had thought about building a simple bridge, but ferrite cores
>>are close to impossible to get in Barcelona (Spain). You get them
>>but with no info at all, just size and color.
>
>Then those have a high chance of being Powdered Iron core. Wrong
>cores.
>
>Find a swap meet where old computers are being offered, especially old
>cables. Look for those power or video connectors that have a plastic
>cylinder at one end, 1 or 2 cm near the actual connector. Cut away
>the plastic, cut away the wires: you have a high chance that you are
>holding a ferrite core that will work.

Now, this is a good idea, I'll try it. I know you can get those
cores from online shops, I just don't like buying over the
internet.

>>Appart from that, I have finally found the schematics of my
>>receiver. Some low-pas and diode limiter and strait to the gate
>>of a fet. This explains the "not exactly 50 ohms" thing.
>
>But it doesn't tell you what Z it IS.

No, but now I know it is probably quite high, so I can try the
reversed 4:1 (or more) balun idea.

73s

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3504. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 07:51:59 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <2vmvk0lapnmj8mlcecsh48jkogcbt5va2g@4ax.com>
Source record: 89225

Hi Richard,

En Richard Harrison va escriure en Mon, 20 Sep 2004 10:24:54
-0500:

>Toni wrote:
>"This explains the "not exactly 50 ohms" thing."
>
>The FET input resistance is high and a shunt diode probably has high
>impedance at low signals.

>Due to lower antenna loading, a high
>receiver input impedance does better with a too-short antenna than does
>a 50-ohm input. But high-impedance input may be more susceptible to
>interference and overload.
>
>Maximum power transfer to a receiver occurs when there is a conjugate
>match between the antenna and its receiver. This may, however, not give
>the best noise performance.

Yes, but my main objective for all this is feeding the receiver
with the signal comming from the antenna well above the roof, and
(try to) avoid feeding the noise picked by the feedline on it's
way down. Light dimmers, fluorescent tubes, the computer, TV,
etc. I can notice a noise difference when turning them on/off,
and that's what I want to solve/improve.

73s,

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3505. Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 09:45:31 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <9ltvk0p7emr1nghti37fn9vsq2fne4m5pg@4ax.com>
Source record: 89226

What is the maximum power I can safely use on 160M and 80M on 26 ga.
copper-plated stranded steel wire? 200 watts?

What is the minimum gauge for a longwire of this material if I want it
to handle 600 watts?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3506. Remote longwire & counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 13:40:31 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <fab0l0h27s0fgg7940npokg5m7r6duv9cu@4ax.com>
Source record: 89227

What options do I have in bringing a longwire antenna and tuned
counterpoise ground to my tuner -- in addition to using the terminals
provided?

Unfortunately, the tuner is 15 ft from the window that both leads will
be coming in from. Rather then string the wires (both RF hot) across
the room, can I connect them to a balun and run co-ax? What balun?
Will I experience large losses in the coax?

Any point in hooking the two leads to ladderline and running that? If
that works, do I still use the ground and longwire terminals of my
tuner? Or the balanced antenna terminals?

If the ladderline works, how long can I make it? It would be more
convenient to have the longwire run to the trees from my attic (and
the counterpoise leave from there), rather than my shack. Could I go
to 50 ft of ladderline?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3507. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 13:55:22 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cipbsa$m11$1@hercules.btinternet.com>
Source record: 89228

Your question cannot be answered unless you specify the maximum allowable temperature of the wire and whether your antenna is in northern Alaska in midwinter at midnight, or in New Mexico at midsummer at noon.

But to be on the safe side, allow for a dissipation of 1 watt per foot length of dipole wire which will then get warm in the centre, somewhat above ambient, when in a slight breeze.

So for a 130 foot, 160-meter dipole, allow 130 watts dissipation. This antenna will easily handle 1 kilowatt of Tx power at a typical efficiency of about 87 percent for copper-plated, stranded steel wire.

Reg, G4FGQ

"Ken" <cprstn54zz@att.net> wrote in message
news:9ltvk0p7emr1nghti37fn9vsq2fne4m5pg@4ax.com...
> What is the maximum power I can safely use on 160M and 80M on 26 ga.
> copper-plated stranded steel wire? 200 watts?
>
> What is the minimum gauge for a longwire of this material if I want it
> to handle 600 watts?
>
> Ken KC2JDY
>
> Ken
> (to reply via email
> remove "zz" from address)

3508. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 14:04:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <0LCdnaVF-vc5qc3cRVn-qw@comcast.com>
Source record: 89229

> But to be on the safe side, allow for a dissipation of 1 watt per foot
> length of dipole wire which will then get warm in the centre, somewhat
> above
> ambient, when in a slight breeze.

But the current distribution isn't linear, and the loss is I^2R, so I would think you'd have to know the max current, and work it that way.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3509. Re: Help Needed - Climbing Belt

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 14:06:27 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <1_KdnbelwcSqqM3cRVn-og@comcast.com>
Source record: 89230

> http://www.altrec.com/published/climb/skills/makingyourownharness/

For what it's worth, I did CPR on a fellow whose climbing belt failed while he was installing a TV antenna on a topped tree. It wasn't pleasant, the crunching of the bone fragments as I did the chest compressions.

Use good gear.
Be certain that it's rigged right.
Don't trust it.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3510. HAM STUFF FOR SALE

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 14:09:05 UTC
From: n2ion@aol.com
Message-ID: <20040921100905.03318.00000943@mb-m17.aol.com>
Source record: 89231

I'M DOWNSIZING MY STATION AND HAVE THE FOLLOWING FOR SALE:

ICOM IC-735 LOW BAND RIG
KLM 15 ELEMENT 220 MHZ YAGI
BIRD ANTENNA TRANSFER SWITCH
KLM 3 ELEMENT 17M YAGI UNUSED BUT ASSEMBLED
DIAMOND 1.2 MHZ VERTICAL ANTENNA IN PACKAGE
4- KLM UHF 30 ELEMENT YAGIS
BIRD MODEL 43 METER
GE MASTR II 1/4 KILOWATT REPEATER IN 6' GE RACK

EMAIL ONLY IF SERIOUSLY INTERESTED.

3511. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 15:26:50 UTC
From: richardharrison@webtv.net
Message-ID: <22487-4150483A-156@storefull-3251.bay.webtv.net>
Source record: 89233

Toni wrote:
"Yes, but my main objective for all this is feeding the receiver with a signal coming from the antenna well above te roof and (try to) avoid feeding the noise picked by the feedline on its way down."

OK. Coax is almost impenetrable at HF. But a directly connected antenna can accept signal from the coax ecterior unless a balun is used at the antenna end of the coax.

I recall using a General Electric "V-Doublet" receiving antenna kit in 1938 that used twisted pair for the transmission line. Broadband transformers were used at each end of the transmission line. They were interchangeable. The high impedance of the antenna and receiver were matched to about 100-ohms, the approximate impedance of the twisted pair.

It worked well on all bands for the multiband GE receiver. The "V-Doublet" antenna system ignored interference to its transmission line.

Coax could be used to replace the twisted pair as the primary and secondary of the transformers are separate and isolated.

Best regards, Richard Harrison, KB5WZI

3512. Re: [OT] Rcvr antenna input impedance

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 15:29:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9ah0l0pbhd0en0n9ckf2or5e84od8n9ohf@4ax.com>
Source record: 89232

On Tue, 21 Sep 2004 09:51:59 +0200, Toni <post_to_usenet@hotmail.com>
wrote:
>Yes, but my main objective for all this is feeding the receiver
>with the signal comming from the antenna well above the roof, and
>(try to) avoid feeding the noise picked by the feedline on it's
>way down. Light dimmers, fluorescent tubes, the computer, TV,
>etc. I can notice a noise difference when turning them on/off,
>and that's what I want to solve/improve.

Hi Toni,

Often, this problem arrives through the AC connection of your radio,
and not over-the-air. You can test this by removing the power cord,
and running off of batteries.

If your set runs off of AC only (no battery option), try borrowing a
portable radio that covers the same bands and use the same
antenna/ground.

If this last step reduces the noise (with the noise sources ON); or
you cannot obtain a portable radio, then try one more option. Use an
extension cord (so that you don't have to move the radio, or
disconnect and move antenna leads) and plug your radio into a wall
outlet in another room. Move this plug around to see if it impacts
the noise problem.

If you find noise is variable by this technique, you are sharing a
circuit with noisy sources and the noise is coming in through the AC
supply. How you solve this is a function of what choices are
available to you. It may mean moving your listening position, or
buying/building an AC line filter (which should not be
expensive/difficult for a low wattage item). This also presumes that
the AC distribution system has a good ground (not always available).
If this is not available, you may need to do it your self, but this
needs to be investigated with care.

73's
Richard Clark, KB7QHC

3513. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 17:01:00 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41505E4C.3020109@psu.edu>
Source record: 89234

Cecil Moore wrote:
> Richard Clark wrote:
>
>> Cecil Moore <w5dxp@hotmail.com> wrote:
>>
>>> what would you do?
>>
>>
>> You still lamenting about Dukakis losing in '98?
>
>
> Worse than that. I'm lamenting about every Libertarian
> presidential candidate losing every single year.
>
> How are your non-weapon negotiations coming with that
> 250 pound guy in the process of raping your daughter?

Umm, Cecil. I support private ownership of guns, and as few laws that regulate such ownership as possible.

But your argument is specious. That 250 pound man may just use his own gun, make you redundant, than continue to use the gun to make sure your daughter stays compliant.

There is plenty enough emotion to go around on both sides, and your argument is just one more.

And since you want that answer, I would use my rifle *if* possible, however, I would have to realize that if I do use it, I would face the possibility of seriously wounding or even killing my daughter. If such an act is taking place, the two would be in obvious close proximity, and bullets do not always travel a straight line. The bullet might very well pass through him, and enter her.

Probably the best course of action is to (unfortunately) wait until he is temporarily incapacitated as will happen, at that point he will likely roll off, and then wait for your moment....

- Mike KB3EIA -

3514. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 17:05:36 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41505F60.9000809@psu.edu>
Source record: 89235

Reg Edwards wrote:
> "Bill Turner" wrote
>
>>The voltage at the ends of a half wave dipole can reach thousands of
>>volts even with relatively low power. Trees have been set on fire with
>>as low as 100 watts. Be careful!
>>
>
> ============================
> Hi Bill,
>
> A half-wave dipole is a resonant tuned circuit.
>
> A 40 meter dipole using 14-gauge wire has a Q of about 11.
>
> At 100 watts there is 85 volts at the feedpoint.
>
> The voltage between the ends of the antenna is 85 times Q which equals 956
> volts.
>
> Therefore, the voltage between one end of the antenna and ground is only 478
> volts.
>
> And this falls to a much lower value when the end of the wire is in contact
> with anything by virtue of the very high antenna impedance of around 1500
> ohms.
>
> Furthermore, the antenna is immediately detuned when it comes into contact
> with anything and Tx power falls.
>
> From where do you get your "thousands of volts" - the old wive's monthly
> magazines?
>
> There are far more Californian forest fires caused by arsonists than 100
> watt transmitters. Fortunately, it doesn't seem to have a bad effect on the
> quality of the wine.

Knowing that you are a wine aficionado, I would mention that there is serious concern about the future quality of the wine. It appears that global warming (which doesn't exist ha ha) has been on average warming the regions of California where the wine grapes are grown. This is causing them to ripen prematurely - at least as far as making the best wine is concerned. Let us hope that a solution is in the works!

- mike KB3EIA -

3515. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 17:25:49 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4150641D.2040801@psu.edu>
Source record: 89236

Cecil Moore wrote:
> Richard Clark wrote:
>
>> Let's see, you cannot catch a kid walking out with a 3 foot assault
>> rifle every day of the week for a year (we will skip holidays and
>> weekends when they are more diligent). Yeah, right, that's how it
>> happened! Shoplifters every day for a year and no one notices it at
>> the till, or in the records, or in the stock room.
>
>
> You are shooting your own argument in the foot. The people you are
> describing are *LAW-BREAKERS*, not law-abiders. There are already laws
> against what they are doing. They already broke the law and you want
> yet another law for them to break??? Why not advocate enforcing the
> existing laws which are not being properly enforced? How many laws do
> they have to break before you realize that law-breakers don't obey laws?
> As I said before, you might as well be advocating laws prohibiting
> hurricanes from hitting Florida.
>
> Gun control laws don't keep guns out of the hands of criminals.
> Gun control laws keep guns out of the hands of law-abiding people
> who need guns to defend themselves against criminals. You and the
> criminals would like to see all law-abiding citizens disarmed and
> helpless.

I noted that i support private ownership of guns before.

But your argument is a bit too simple.

Case in point:

A young boy shot his sister with one of the family guns. It turned out that the father was a real gun person, and firearms were all around the house. In fact, the children's toy guns were stacked along with several real weapons. The little fellow just picked up what he thought was another toy and pointed at his sister. Took her head off f I'm not mistaken.

The parents were tried on reckless endangerment of children. They fought the case as a gun control issue.

Another case is closer to home, much closer. Some years ago, there was a neighbor up the road from us that was shall we say - unusual. Prone to disturbances. He also let guns lay around the house. One day his son brought one of the guns (loaded of course, in case someone breaks in and tries to rape his daughter) points it at my kid, and thank God didn't pull the trigger.

The police confiscated his guns, and he went on a tear about having his rights violated.

Point is, all the "guns don't kill people, people kill people", and who's raping who's daughter, and all the other emotional arguments wouldn't have meant much to me would it?

The problem with too many people regarding gun laws is that they only think of the back end of things. It's all after it's over.

> In case you missed it: LAW-BREAKERS don't obey laws. They don't obey
> the present laws and they won't obey any new laws that you are advocating.

> To keep the thread on topic: IMO, you can't see the forest for the trees.

On both sides of the issue

- Mike KB3EIA -

3516. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 17:35:16 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <oDZ3d.6436$gG4.271@newsread1.news.pas.earthlink.net>
Source record: 89237

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41505F60.9000809@psu.edu...
> Reg Edwards wrote:
> > "Bill Turner" wrote
> >
> >>The voltage at the ends of a half wave dipole can reach thousands of
> >>volts even with relatively low power. Trees have been set on fire with
> >>as low as 100 watts. Be careful!
> >>
> >
> > ==========
> > Hi Bill,
> >
> > A half-wave dipole is a resonant tuned circuit.
> >
> > A 40 meter dipole using 14-gauge wire has a Q of about 11.
> >
> > At 100 watts there is 85 volts at the feedpoint.
> >
> > The voltage between the ends of the antenna is 85 times Q which equals
956
> > volts.
> >
> > Therefore, the voltage between one end of the antenna and ground is only
478
> > volts.
> >
> > And this falls to a much lower value when the end of the wire is in
contact
> > with anything by virtue of the very high antenna impedance of around
1500
> > ohms.
> >
> > Furthermore, the antenna is immediately detuned when it comes into
contact
> > with anything and Tx power falls.
> >
> > From where do you get your "thousands of volts" - the old wive's
monthly
> > magazines?
> >
> > There are far more Californian forest fires caused by arsonists than 100
> > watt transmitters. Fortunately, it doesn't seem to have a bad effect on
the

> > quality of the wine.
>
> Knowing that you are a wine aficionado, I would mention that there is
> serious concern about the future quality of the wine. It appears that
> global warming (which doesn't exist ha ha) has been on average warming
> the regions of California where the wine grapes are grown. This is
> causing them to ripen prematurely - at least as far as making the best
> wine is concerned. Let us hope that a solution is in the works!
>
> - mike KB3EIA -
>
But Rush said there's no such thing as global warming.
(Tell that to all the dead coral and melted glaciers.)
So sorry to hear about the wine. Better drink some moore quick!
73
H.
NQ5H

3517. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 17:48:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <41q0l09c12o27pnntscghikat938058hqq@4ax.com>
Source record: 89238

On Tue, 21 Sep 2004 17:35:16 GMT, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>But Rush said there's no such thing as global warming.
>(Tell that to all the dead coral and melted glaciers.)
>So sorry to hear about the wine. Better drink some moore quick!

Hi All,

The Wine out of the Pacific Northwest is fast gaining a high
reputation. Could be from that same warming trend.

I must add that this last summer was one of the muggiest I've lived
through here. Humidity in the 80s. It almost competes with D.C.'s
June weather when I was back there during Reagan's funeral.

73's
Richard Clark, KB7QHC

3518. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 17:54:06 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <2VZ3d.6446$gG4.6204@newsread1.news.pas.earthlink.net>
Source record: 89239

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:41q0l09c12o27pnntscghikat938058hqq@4ax.com...
> On Tue, 21 Sep 2004 17:35:16 GMT, "H. Adam Stevens, NQ5H"
> <NQ5H@ARRL.net> wrote:
>
> >But Rush said there's no such thing as global warming.
> >(Tell that to all the dead coral and melted glaciers.)
> >So sorry to hear about the wine. Better drink some moore quick!
>
> Hi All,
>
> The Wine out of the Pacific Northwest is fast gaining a high
> reputation. Could be from that same warming trend.
>
> I must add that this last summer was one of the muggiest I've lived
> through here. Humidity in the 80s. It almost competes with D.C.'s
> June weather when I was back there during Reagan's funeral.
>
> 73's
> Richard Clark, KB7QHC
There's a Wasington State Merlot (I'll remember the name next time I look at
a wine list) that I like all too much.
Now how are we going to connect this to antennas? I know! Empty wine bottles
make great base insulators for verticals!
73
H.

3519. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 18:13:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9hr0l05e4eogqci0v2o46bv90tr8sv7ps1@4ax.com>
Source record: 89240

On Tue, 21 Sep 2004 17:54:06 GMT, "H. Adam Stevens, NQ5H"
<NQ5H@ARRL.net> wrote:

>There's a Wasington State Merlot (I'll remember the name next time I look at
>a wine list) that I like all too much.
>Now how are we going to connect this to antennas? I know! Empty wine bottles
>make great base insulators for verticals!

My longwire could almost reach the Chateau Ste. Michelle winery (but
was closer to the Columbia winery and closer yet to the Red Hook ale
brewery).

73's
Richard Clark, KB7QHC

3520. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 18:25:43 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <Hm_3d.6460$gG4.5359@newsread1.news.pas.earthlink.net>
Source record: 89241

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:9hr0l05e4eogqci0v2o46bv90tr8sv7ps1@4ax.com...
> On Tue, 21 Sep 2004 17:54:06 GMT, "H. Adam Stevens, NQ5H"
> <NQ5H@ARRL.net> wrote:
>
> >There's a Wasington State Merlot (I'll remember the name next time I look
at
> >a wine list) that I like all too much.
> >Now how are we going to connect this to antennas? I know! Empty wine
bottles
> >make great base insulators for verticals!
>
> My longwire could almost reach the Chateau Ste. Michelle winery (but
> was closer to the Columbia winery and closer yet to the Red Hook ale
> brewery).
>
> 73's
> Richard Clark, KB7QHC

THAT'S IT!!!
Chateau Ste. Michelle!
Thanks!
73
H.

3521. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 19:12:29 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cipueteqh1@titan.btinternet.com>
Source record: 89242

"Dave VanHorn" wrote -
> Reg wrote -
> > But to be on the safe side, allow for a dissipation of 1 watt per foot
> > length of dipole wire which will then get warm in the centre, somewhat
> > above
> > ambient, when in a slight breeze.
>
> But the current distribution isn't linear, and the loss is I^2R, so I
would
> think you'd have to know the max current, and work it that way.
>
==========
Yes Dave, I know. But I did say the wire gets warm at the centre. Sorry I forgot to say it remains cold at the ends except for the small conduction of heat along the wire. And it does not get quite so warm when it rains or snows.

Actually, the current distribution along a 1/2-wave dipole is exactly a sinewaveform. This is arithmetically very convenient because the linearly distributed wire resistance then behaves as though it is lumped at the dipole centre with a value exactly half of the overall distributed value.

Now the end-to-end resistance of a 1/2-wave, 160-meter dipole, made with 26-gauge copper-plated wire, is about 22 ohms. Therefore the feedpoint resistance of the antenna is the radiation resistance of 73 plus 22/2 ohms = 84 ohms.

Therefore, with Tx power equal to 1000 watts and a current at the centre equal to 3.45 amps, the overall loss of power dissipated in the antenna wire is equal to 3.45 squared times half of the end-to-end conductor resistance of 11 ohms. Which (as I said in my previous message) equals 131 watts.

Which raises the wire temperature a harmless handfull of a few degrees Celsius. Actual temperature, of course, depends on the open-air ambient temperature at noon, in June, in the New Mexico desert.

Antenna radiating efficiency = 73/(73+11) = 84 percent, or a loss of 0.76 decibels, or 1/8th of an S-unit. Which, by no stretch of the imagination, is likely to influence the results of a contest.

Isn't it remarkable what a little bit of ohms-law and arithmetic can do?

Mathematics - don't make me laugh! <smiley>

Mathematics is what English infants school teachers refer to when whining for a pay rise. To such a level are what the western-world's standards of education have been reduced.

Reg, G4FGQ

3522. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 19:20:34 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <6a%3d.6479$gG4.192@newsread1.news.pas.earthlink.net>
Source record: 89243

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cipueteqh1@titan.btinternet.com...
>
> "Dave VanHorn" wrote -
> > Reg wrote -
> > > But to be on the safe side, allow for a dissipation of 1 watt per foot
> > > length of dipole wire which will then get warm in the centre, somewhat
> > > above
> > > ambient, when in a slight breeze.
> >
> > But the current distribution isn't linear, and the loss is I^2R, so I
> would
> > think you'd have to know the max current, and work it that way.
> >
> ============================
> Yes Dave, I know. But I did say the wire gets warm at the centre. Sorry
I
> forgot to say it remains cold at the ends except for the small conduction
of
> heat along the wire. And it does not get quite so warm when it rains or
> snows.
>
> Actually, the current distribution along a 1/2-wave dipole is exactly a
> sinewaveform. This is arithmetically very convenient because the linearly
> distributed wire resistance then behaves as though it is lumped at the
> dipole centre with a value exactly half of the overall distributed value.
>
> Now the end-to-end resistance of a 1/2-wave, 160-meter dipole, made with
> 26-gauge copper-plated wire, is about 22 ohms. Therefore the feedpoint
> resistance of the antenna is the radiation resistance of 73 plus 22/2 ohms
=
> 84 ohms.
>
> Therefore, with Tx power equal to 1000 watts and a current at the centre
> equal to 3.45 amps, the overall loss of power dissipated in the antenna
wire
> is equal to 3.45 squared times half of the end-to-end conductor resistance
> of 11 ohms. Which (as I said in my previous message) equals 131 watts.
>
> Which raises the wire temperature a harmless handfull of a few degrees
> Celsius. Actual temperature, of course, depends on the open-air ambient
> temperature at noon, in June, in the New Mexico desert.
>
> Antenna radiating efficiency = 73/(73+11) = 84 percent, or a loss of 0.76

> decibels, or 1/8th of an S-unit. Which, by no stretch of the imagination,
> is likely to influence the results of a contest.
>
> Isn't it remarkable what a little bit of ohms-law and arithmetic can do?
>
> Mathematics - don't make me laugh! <smiley>
>
> Mathematics is what English infants school teachers refer to when whining
> for a pay rise. To such a level are what the western-world's standards of
> education have been reduced.
> ----
> Reg, G4FGQ
>
>
Reg
I went to public schools in Texas in the 50's and 60's.
There were no standards then. School was a pathetic joke.
If I hadn't had ham radio, cars and flying as teenage passions, I never
would have learned math or physics.
73
H., NQ5H

3523. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 19:20:48 UTC
From: "Gary S." <Idontwantspam@net>
Message-ID: <jmv0l0puun85kdjned1d0hdiqq3bsl1iql@4ax.com>
Source record: 89244

On Tue, 21 Sep 2004 09:04:00 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>> But to be on the safe side, allow for a dissipation of 1 watt per foot
>> length of dipole wire which will then get warm in the centre, somewhat
>> above
>> ambient, when in a slight breeze.
>
>But the current distribution isn't linear, and the loss is I^2R, so I would
>think you'd have to know the max current, and work it that way.

I don't think you should count on a perfect SWR match, either, and
should size for some amount of mismatch.

Worst case kind of thinking.

Happy trails,
Gary (net.yogi.bear)
---
at the 51st percentile of ursine intelligence

Gary D. Schwartz, Needham, MA, USA
Please reply to: garyDOTschwartzATpoboxDOTcom

3524. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:04:12 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4150893C.5080905@psu.edu>
Source record: 89245

Cecil Moore wrote:
> Bob Miller wrote:
>
>> Jack, please explain why we need battlefield weapons in a civilian
>> society.
>
>
> That's simple. Because the criminals are armed with battlefield
> weapons. Don't know about you, but I think it's stupid to take
> my 66 year-old fists to a gunfight.
>
>> How many times do you need to shoot that beautiful deer before you
>> drag it to the sausage maker?
>
>
> Deer don't shoot back. Criminals, including terrorists do, and
> sometimes with fully automatic weapons. The criminals obviously
> want the ordinary citizens to be disarmed. But why should you
> want exactly the same thing as the criminals?
>
> Did you know that the crime rate is falling in the concealed-carry
> states? Did you know that a majority of states are concealed-carry
> states? If you were a criminal, would you really want to take on
> someone who might be packin' a concealed Colt .45?

If I were a criminal, and I thought my victim might be carrying a
concealed Colt .45, I would use a different tactic.

- Mike KB3EIA -

3525. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:16:08 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <41508C19.ED4CAD7D@shaw.ca>
Source record: 89246

Reg Edwards wrote:
>
> "Dave VanHorn" wrote -

> > But the current distribution isn't linear, and the loss is I^2R, so I
> would
> > think you'd have to know the max current, and work it that way.
> >
> ============================
> Yes Dave, I know. But I did say the wire gets warm at the centre. Sorry I
> forgot to say it remains cold at the ends except for the small conduction of
> heat along the wire. And it does not get quite so warm when it rains or
> snows.
>
This can be empirical verified by running a 1KW signal into the
antenna and feeling the ends!

(Kids! Don't try this at home!)

Irv VE6BP

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3526. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:18:07 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <41508C7F.1000107@psu.edu>
Source record: 89249

H. Adam Stevens, NQ5H wrote:
> "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> news:41505F60.9000809@psu.edu...
>
>>Reg Edwards wrote:
>>
>>>"Bill Turner" wrote
>>>
>>>
>>>>The voltage at the ends of a half wave dipole can reach thousands of
>>>>volts even with relatively low power. Trees have been set on fire with
>>>>as low as 100 watts. Be careful!
>>>>
>>>
>>>==========
>>>Hi Bill,
>>>
>>>A half-wave dipole is a resonant tuned circuit.
>>>
>>>A 40 meter dipole using 14-gauge wire has a Q of about 11.
>>>
>>>At 100 watts there is 85 volts at the feedpoint.
>>>
>>>The voltage between the ends of the antenna is 85 times Q which equals
>>
> 956
>
>>>volts.
>>>
>>>Therefore, the voltage between one end of the antenna and ground is only
>>
> 478
>
>>>volts.
>>>
>>>And this falls to a much lower value when the end of the wire is in
>>
> contact
>
>>>with anything by virtue of the very high antenna impedance of around
>>
> 1500
>
>>>ohms.

>>>
>>>Furthermore, the antenna is immediately detuned when it comes into
>>
> contact
>
>>>with anything and Tx power falls.
>>>
>>>From where do you get your "thousands of volts" - the old wive's
>>
> monthly
>
>>>magazines?
>>>
>>>There are far more Californian forest fires caused by arsonists than 100
>>>watt transmitters. Fortunately, it doesn't seem to have a bad effect on
>>
> the
>
>>>quality of the wine.
>>
>>Knowing that you are a wine aficionado, I would mention that there is
>>serious concern about the future quality of the wine. It appears that
>>global warming (which doesn't exist ha ha) has been on average warming
>>the regions of California where the wine grapes are grown. This is
>>causing them to ripen prematurely - at least as far as making the best
>>wine is concerned. Let us hope that a solution is in the works!
>>
>>- mike KB3EIA -
>>
>
> But Rush said there's no such thing as global warming.
> (Tell that to all the dead coral and melted glaciers.)
> So sorry to hear about the wine. Better drink some moore quick!

Ahh, I kind of enjoy Rush, or did until he started to get redundant.
But I wouldn't take him as a science adviser! ;^)

Seriously, I would be willing to entertain the notion that global
warming is not happening. But what I need is a good explanation of of
the mechanism keeping it from happening. Certainly the oceans can sink
some CO2, but only so much.

The effect of CO2 on thermal retention in the atmosphere is not bogus,
and there are plenty of other gases that are likely a worse problem,
such as methane. Methane is hardly being addressed now.

There are possible effects that will mitigate the heat retention, but I
want to know what they are, not just that the warming effec isn't real.
To say that global warming doesn't exist is not far from saying Ohms law
is wrong.

I wish proof, not politics. unlike El Rushbo, I don't think that every timee it snows is the disproof of it. We might check with our Canadian friends on how their growing season has been affected.

- Mike KB3EIA -

3527. Re: Any experiences with inverted L and elevated radials

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:22:03 UTC
From: Floyd Sense <fsense***@risp.biz>
Message-ID: <ciq3cs$t3$1@news.chatlink.com>
Source record: 89248

Hi Evan. I haven't done a scientific comparison, but am currently using two resonant elevated radials with my inverted L on 160. They're only 8-10 feet off the ground. I'm sure the efficiency is rather low, but I've worked into JA land a couple of times with it and did quite well on 160 last season. The herd of deer living in the back woods, as well as the lay of the land make radials on the ground rather difficult for me. Based on my experience of last year, I'd say the two raised radials do better than the 8 radials I had on the ground in previous years. Of course, both situations are far from optimum on 160, but since I can work everything I can hear (no beverages), I'd say the antenna is adequate.

K8AC
Floyd in Angier, NC

"K9SQG" <k9sqg@aol.com> wrote in message
news:20040920215751.08200.00000872@mb-m06.aol.com...
> Just wonder if anybody out there has experimented and compared inverted L
> performance with elevated vs buried radials, particularly on 160 meters.
>
> 73s,
>
> Evan

3528. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:22:09 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <R304d.1696$g42.814@newsread3.news.pas.earthlink.net>
Source record: 89247

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:4150893C.5080905@psu.edu...
> Cecil Moore wrote:
> > Bob Miller wrote:
> >
> >> Jack, please explain why we need battlefield weapons in a civilian
> >> society.
> >
> >
> > That's simple. Because the criminals are armed with battlefield
> > weapons. Don't know about you, but I think it's stupid to take
> > my 66 year-old fists to a gunfight.
> >
> >> How many times do you need to shoot that beautiful deer before you
> >> drag it to the sausage maker?
> >
> >
> > Deer don't shoot back. Criminals, including terrorists do, and
> > sometimes with fully automatic weapons. The criminals obviously
> > want the ordinary citizens to be disarmed. But why should you
> > want exactly the same thing as the criminals?
> >
> > Did you know that the crime rate is falling in the concealed-carry
> > states? Did you know that a majority of states are concealed-carry
> > states? If you were a criminal, would you really want to take on
> > someone who might be packin' a concealed Colt .45?
>
>
> If I were a criminal, and I thought my victim might be carrying a
> concealed Colt .45, I would use a different tactic.
>
> - Mike KB3EIA -
>
The fear of being on the wrong end of a 12 gauge prevents many burglaries.
I have seen interviews with convicts and also the book "More Guns Less
Crime" that bear this out.
It is my understanding that since the Aussies disarmed themselves they have
paid the price.
In Texas, CHL holders have a lower crime rate than the cops.
The last intruder in my house got a .357 magnum in the face; blew the back
of his head off.
He was a 5 foot timber rattlesnake. I had a model 19 Smith.
73
H. NQ5H

OB Antenna
If a half wave dipole in the forest falls to the ground when nobody's there,
does it make a sound?

3529. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:49:15 UTC
From: "Dogs, nothing but dogs !!" <s74h3dn387h@Hotmail.com>
Message-ID: <415093cf@post.usenet.com>
Source record: 89250

**** Post for FREE via your newsreader at post.usenet.com ****

I wrote:
> ...the differences are quite clear.

"Richard Clark":
> ..."what is different" is what I asked for.

My views of the differences were already explicitly listed:
>>> It's the difference between optics
>>> and EM (Yes, I know, I know...*),
>>> or between nerves and conductors,
>>> or between biology and physics.

[*I'm as in favour of the fundamental sameness of light to radio waves as anyone.]

I would have thought it an obvious and reasonable assumption that biological optical sensors, including insects, are typically based on 'wetware' (photochemical reactions). In other words, the question is - are the insect's optical receptors (INSIDE the photoreceptor cells which are themselves clustered INSIDE the purely-structural ommatidium) something functionally similar to a quarter-lamda conductors, or something related to an optical/photochemical sensor (wetware) ???

Here's a webpage that states that all eyes (including humans and the fruit fly, an insect) have the same genetic basis (read the whole thing carefully - it is interesting):
http://www.pbs.org/wgbh/evolution/library/04/4/text_pop/l_044_01.html

It seems that my assumption is not not only reasonable, but also seems to be correct. Eyes (human or insect) are wetware, not antennas. Just as I assumed.

Thus, K4WGE's comment (below) about the CNN news is not applicable.
"k4wge" supposed incorrectly:
> This antenna was invented much earlier, actually, as the
> compound eye of insects and other arthropods.

And to explicitly answer your question:
"Richard Clark"
> What's the difference in Truro?

Discussed in exhaustive detail above - couldn't possibly be more clear.

As you know, it is impossible to prove a negative, but here is as close as I can get:
www.google.com/search?q=%22insect+eye%22+monopole

'Your search - "insect eye" monopole - did not match any documents.'
[Can't use 'antenna' for obvious reasons - insects - think about it...]

The ball is firmly in your court to better my negative search results with a link that clearly supports the position that you appear to be supporting (insect eyes = antennas). I'm asking you to prove a positive. Can you point me to anything on the WWW that clearly backs-up your apparent (?) position that insect eyes are based on 'antennas'? I believe that your position, apparently supporting K4WGE's apparently incorrect statement, is nuked and a smoldering ruin, but I'm open to more data.

Also, if anyone has any links to prior art 'visible' light scale antennas, please post links. IR need not apply - could be ten times the size (maybe more).

> More than two cars at an intersection is a traffic jam?

It seems that you've never been to the Truro (that I'm referring to) on a Saturday. There are rumours that missing union leader Jimmy Hoffa might simply be stuck in traffic somewhere near downtown Truro, NS.

-=-=-=

3530. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:51:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1p31l0p44aou91m24carlpll7fodvnrt7k@4ax.com>
Source record: 89251

On Tue, 21 Sep 2004 16:18:07 -0400, Mike Coslo <mjc5remove@psu.edu>
wrote:

>We might check with our Canadian
>friends on how their growing season has been affected.

Hi Mike,

Check the folks who pay for crop failures: the insurance industry.

Won't be long before the red states (or is that states in the red?)
are clamoring for insurance reform, tax rebates, corporate welfare,
interest free loans, loan default amnesty, financial assistance...

Hey wait! That is where all the homeland defense funds are going
right now. New York City has been crying for help against terrorism
for 3 years now, and the funding has been shuffled off to high
terrorist profile sites like Paducah.

Well, if you ignore the ports, you can rest assured we won't have to
worry about exports. If we don't worry about exports there will be
more for all here (at depressed prices - think dust bowl). We won't
have to worry about the trade deficit either because if we ain't
sellin' we won't be buying (same port issue even if we did want a DVD
player).

I wonder how we're going to get the oil in? 15,000 mile sub-oceanic
pipelines with Iraqi suicide frogmen every 6 feet? I suppose we could
torch the beaches from all the spills and start a second "solar" power
industry. Global warming? I'll show you warming, stay away from the
surf!

Political denial covers a lot of uncomfortable ills.

73's
Richard Clark, KB7QHC

3531. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 20:52:19 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ciq4a3$rv5$1@titan.btinternet.com>
Source record: 89252

There is NO sharp dividing line between rec.radio.amateur.antenna and politics. Or any other newsgroup.

It's just a matter of keeping topics in sensible proportion.

How else would I learn about Bush, puppy-dog Blair, atmospheric polution, the frequency of forest fires caused by 100-watt transmitters with short-whip mobile antennas high up in trees, and the impending state of the present excellent Californian winery's?

Reg, G4FGQ

3532. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:03:57 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <1H04d.1717$g42.4@newsread3.news.pas.earthlink.net>
Source record: 89253

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:41508C7F.1000107@psu.edu...
> H. Adam Stevens, NQ5H wrote:
> > "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> > news:41505F60.9000809@psu.edu...
> >
> >>Reg Edwards wrote:
> >>
> >>>"Bill Turner" wrote
> >>>
> >>>
> >>>>The voltage at the ends of a half wave dipole can reach thousands of
> >>>>volts even with relatively low power. Trees have been set on fire
with
> >>>>as low as 100 watts. Be careful!
> >>>>
> >>>
> >>>==========
> >>>Hi Bill,
> >>>
> >>>A half-wave dipole is a resonant tuned circuit.
> >>>
> >>>A 40 meter dipole using 14-gauge wire has a Q of about 11.
> >>>
> >>>At 100 watts there is 85 volts at the feedpoint.
> >>>
> >>>The voltage between the ends of the antenna is 85 times Q which equals
> >>
> > 956
> >
> >>>volts.
> >>>
> >>>Therefore, the voltage between one end of the antenna and ground is
only
> >>
> > 478
> >
> >>>volts.
> >>>
> >>>And this falls to a much lower value when the end of the wire is in
> >>
> > contact
> >
> >>>with anything by virtue of the very high antenna impedance of around

> >>
> > 1500
> >
> >>>ohms.
> >>>
> >>>Furthermore, the antenna is immediately detuned when it comes into
> >>
> > contact
> >
> >>>with anything and Tx power falls.
> >>>
> >>>From where do you get your "thousands of volts" - the old wive's
> >>
> > monthly
> >
> >>>magazines?
> >>>
> >>>There are far more Californian forest fires caused by arsonists than
100
> >>>watt transmitters. Fortunately, it doesn't seem to have a bad effect on
> >>
> > the
> >
> >>>quality of the wine.
> >>
> >>Knowing that you are a wine aficionado, I would mention that there is
> >>serious concern about the future quality of the wine. It appears that
> >>global warming (which doesn't exist ha ha) has been on average warming
> >>the regions of California where the wine grapes are grown. This is
> >>causing them to ripen prematurely - at least as far as making the best
> >>wine is concerned. Let us hope that a solution is in the works!
> >>
> >>- mike KB3EIA -
> >>
> >
> > But Rush said there's no such thing as global warming.
> > (Tell that to all the dead coral and melted glaciers.)
> > So sorry to hear about the wine. Better drink some moore quick!
>
> Ahh, I kind of enjoy Rush, or did until he started to get redundant.
> But I wouldn't take him as a science adviser! ;^)
>
> Seriously, I would be willing to entertain the notion that global
> warming is not happening. But what I need is a good explanation of of
> the mechanism keeping it from happening. Certainly the oceans can sink
> some CO2, but only so much.
>
> The effect of CO2 on thermal retention in the atmosphere is not bogus,
> and there are plenty of other gases that are likely a worse problem,
> such as methane. Methane is hardly being addressed now.

>
> There are possible effects that will mitigate the heat retention, but I
> want to know what they are, not just that the warming effec isn't real.
> To say that global warming doesn't exist is not far from saying Ohms law
> is wrong.
>
> I wish proof, not politics. unlike El Rushbo, I don't think that every
> timee it snows is the disproof of it. We might check with our Canadian
> friends on how their growing season has been affected.
>
> - Mike KB3EIA -
>
It's real enough; literally decimated the world's coral reefs.
But the atmospheric carbon budget is still not well understood.
However the weather, being a chaotic system, probably becomes more chaotic as more energy is added.
For an excellent discussion of chaos and the weather 1000 years ago see "The Great Maya Droughts" by my old buddy Dick Gill.
Glaciers and permafrost are melting. Ice core data suggest the CO2 in the atmosphere shot up with the industrial revolution and is at it's highest in 50,000 years.
I dove for NASA in 1970 at Tektite II in the Virgin Islands. I went back to the site at St John in 1997.
The coral was much harder to find. Where I remembered reefs was sand and sea grass.
I'm going back in January.
Over 10 years of diving in Hawaii I have watched the coral population at Tunnels Beach, specifically, diminish dramatically.
One of my grad students is from Puerto Rico. He's noticed the coral decline in his 20-odd years.
Just a couple of degrees dramatically moves the permafrost boundaries.
Any Alaskans here? Canuks?
How much are we at fault? Can we change anything? I think the answers are some or a lot, yes and no.

OB Ham topic. I operated W3YRQ's (Jerre I am sorry if I got your call wrong, it has been 34 years) KWM2 on 20 meter SSB from the Tektite II habitat.
I believe Jerre and I are still the only hams to operate on the ocean floor.
73
H., NQ5H

3533. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:04:36 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <EH04d.1722$g42.21@newsread3.news.pas.earthlink.net>
Source record: 89254

zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzt!
"Irv Finkleman" <finkirv@shaw.ca> wrote in message
news:41508C19.ED4CAD7D@shaw.ca...
> Reg Edwards wrote:
> >
> > "Dave VanHorn" wrote -
>
> > > But the current distribution isn't linear, and the loss is I^2R, so I
> > would
> > > think you'd have to know the max current, and work it that way.
> > >
> > ============================
> > Yes Dave, I know. But I did say the wire gets warm at the centre.
Sorry I
> > forgot to say it remains cold at the ends except for the small
conduction of
> > heat along the wire. And it does not get quite so warm when it rains or
> > snows.
> >
> This can be empirical verified by running a 1KW signal into the
> antenna and feeling the ends!
>
> (Kids! Don't try this at home!)
>
> Irv VE6BP
>
>
> ---------------------
> Irv Finkleman,
> Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
> Calgary, Alberta, Canada

3534. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:11:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d651l05nuqp39n61lpihbtiiqtfg5pg365@4ax.com>
Source record: 89255

On Tue, 21 Sep 2004 17:49:15 -0300, "Dogs, nothing but dogs !!"
<s74h3dn387h@Hotmail.com> wrote:

>The ball is firmly in your court to better my negative search results with a
>link that clearly supports the position that you appear to be supporting
>(insect eyes = antennas).

Hi OM,

There is a world of difference between nanotech conductors, especially carbon nanotubes, and conventional conductors. There is a world of similarity between nanotech conductors, and wetware as you describe it. In fact, one nanotechnology framework is the DNA molecule. 300 base pairs would be adequate for a quarterwave visible light structure.

Trying to force Newtonian physics into a Quantum solution fails not in the application, but in the explanation.

73's
Richard Clark, KB7QHC

3535. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:14:20 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <MQ04d.6547$gG4.6171@newsread1.news.pas.earthlink.net>
Source record: 89256

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:1p31l0p44aou91m24carlpll7fodvnrt7k@4ax.com...
> On Tue, 21 Sep 2004 16:18:07 -0400, Mike Coslo <mjc5remove@psu.edu>
> wrote:
>
> >We might check with our Canadian
> >friends on how their growing season has been affected.
>
> Hi Mike,
>
> Check the folks who pay for crop failures: the insurance industry.
>
> Won't be long before the red states (or is that states in the red?)
> are clamoring for insurance reform, tax rebates, corporate welfare,
> interest free loans, loan default amnesty, financial assistance...
>
> Hey wait! That is where all the homeland defense funds are going
> right now. New York City has been crying for help against terrorism
> for 3 years now, and the funding has been shuffled off to high
> terrorist profile sites like Paducah.
>
> Well, if you ignore the ports, you can rest assured we won't have to
> worry about exports. If we don't worry about exports there will be
> more for all here (at depressed prices - think dust bowl). We won't
> have to worry about the trade deficit either because if we ain't
> sellin' we won't be buying (same port issue even if we did want a DVD
> player).
>
> I wonder how we're going to get the oil in? 15,000 mile sub-oceanic
> pipelines with Iraqi suicide frogmen every 6 feet? I suppose we could
> torch the beaches from all the spills and start a second "solar" power
> industry. Global warming? I'll show you warming, stay away from the
> surf!
>
> Political denial covers a lot of uncomfortable ills.
>
> 73's
> Richard Clark, KB7QHC

Denial ain't just a river in Egypt.
Just remember, we were there when S-Lines were NEW.
73
H., NQ5H

3536. Re: Help Needed - Climbing Belt

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:16:11 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10l16g9jpe2i72e@corp.supernews.com>
Source record: 89257

Amen!
If you are going to climb, buy new from a reputable company, make sure
that it fits, and do not loan it to anyone. Even the old Scot does not
think of economizing when it comes to climbing harnesses. 73 Mac

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:1_KdnbelwcSqqM3cRVn-og@comcast.com...
> > http://www.altrec.com/published/climb/skills/makingyourownharness/
>
> For what it's worth, I did CPR on a fellow whose climbing belt failed
while
> he was installing a TV antenna on a topped tree. It wasn't pleasant, the
> crunching of the bone fragments as I did the chest compressions.
>
> Use good gear.
> Be certain that it's rigged right.
> Don't trust it.
>
> --
> KC6ETE Dave's Engineering Page, www.dvanhorn.org
> Microcontroller Consultant, specializing in Atmel AVR
>
>

3537. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:17:33 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <NT04d.6550$gG4.3173@newsread1.news.pas.earthlink.net>
Source record: 89258

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:d651l05nuqp39n61lpihbtiiqtfg5pg365@4ax.com...
> On Tue, 21 Sep 2004 17:49:15 -0300, "Dogs, nothing but dogs !!"
> <s74h3dn387h@Hotmail.com> wrote:
>
> >The ball is firmly in your court to better my negative search results
with a
> >link that clearly supports the position that you appear to be supporting
> >(insect eyes = antennas).
>
> Hi OM,
>
> There is a world of difference between nanotech conductors, especially
> carbon nanotubes, and conventional conductors. There is a world of
> similarity between nanotech conductors, and wetware as you describe
> it. In fact, one nanotechnology framework is the DNA molecule. 300
> base pairs would be adequate for a quarterwave visible light
> structure.
>
> Trying to force Newtonian physics into a Quantum solution fails not in
> the application, but in the explanation.
>
> 73's
> Richard Clark, KB7QHC

Heisenberg's dad, an engineer IIRC, told him not to go into Physics, it was
all done.
Boy was HE wrong!
Theorys are just ways of thinking about observations and as such are only
useful when and where they work.
73
H., NQ5H

3538. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-21 21:59:08 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4150a3ab.134751161@news.blueyonder.co.uk>
Source record: 89259

On Mon, 20 Sep 2004 14:33:06 -0500, "Dave VanHorn"
<dvanhorn@cedar.net> wrote:

>
>While I have no trouble believing that someone is working twoard this, you
>might remember what we were told about how Russia was working to take over
>here.. Turned out that they were being told that we were trying to take them
>over, and they were doing what they thought they had to do for self
>defence..

It's because the little boys in the Pentagon, the CIA and our MI5 and
MI6 in the UK like to play war games. They haven't grown up. As you
rightly imply, Mr Joe Average in any country just wants to live out
his life in peace and quiet.

3539. Iam in the prcess of putting a 80 mtr inverted V up

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 00:40:43 UTC
From: Lou W <Louisnot@home.com>
Message-ID: <1S34d.288003$Lj.31394@fed1read03>
Source record: 89260

I have read conflicting reccomendations about feeding this with 450 ohm
ladder. 300, ohm twin lead or using coax with a balun.
Are the any resons to pick/or not use any othe the above systems? Also my
tuner is an MFJ 941-D and the rig is a Kenwood
TS680S. At some point I will upgrade the rig. Should I look for a better,
moderately priced, tuner to help as intend to work
as many bands a I am able. I will of course be playinhg with building and
testing may homebrew antenna in the future.IOW
is my tuner a POS or is it passable for the time being.
TIA
Lou KE6LZS

3540. Re: HAM STUFF FOR SALE {scam??}

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 00:55:27 UTC
From: Bob <nowhere@nospam.org>
Message-ID: <M344d.14392$pA.1015629@news20.bellglobal.com>
Source record: 89261

Is this not the guy who several months back was soliciting 'donations'
of gear for a ham club??

N2ION wrote:

> I'M DOWNSIZING MY STATION AND HAVE THE FOLLOWING FOR SALE:
>
> ICOM IC-735 LOW BAND RIG
> KLM 15 ELEMENT 220 MHZ YAGI
> BIRD ANTENNA TRANSFER SWITCH
> KLM 3 ELEMENT 17M YAGI UNUSED BUT ASSEMBLED
> DIAMOND 1.2 MHZ VERTICAL ANTENNA IN PACKAGE
> 4- KLM UHF 30 ELEMENT YAGIS
> BIRD MODEL 43 METER
> GE MASTR II 1/4 KILOWATT REPEATER IN 6' GE RACK
>
> EMAIL ONLY IF SERIOUSLY INTERESTED.

3541. Re: Iam in the prcess of putting a 80 mtr inverted V up

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 01:10:35 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <4150D11D.A96DC381@shaw.ca>
Source record: 89262

Lou W wrote:
>
> I have read conflicting reccomendations about feeding this with 450 ohm
> ladder. 300, ohm twin lead or using coax with a balun.
> Are the any resons to pick/or not use any othe the above systems? Also my
> tuner is an MFJ 941-D and the rig is a Kenwood
> TS680S. At some point I will upgrade the rig. Should I look for a better,
> moderately priced, tuner to help as intend to work
> as many bands a I am able. I will of course be playinhg with building and
> testing may homebrew antenna in the future.IOW
> is my tuner a POS or is it passable for the time being.
> TIA
> Lou KE6LZS

An 80M inverted V will work just fine on all bands using your 941D. There is nothing wrong with the rig. The difference between expensive 450 ladder line and the cheapest 300 twin lead will be insignificant. I ran my inverted V for 13 years using cheapo twin lead and never had a problem with dust, rain, or anything that the naysayers can come up with. If you use coax and a balun you will only be good for 80M.

Hope this helps...

Irv VE6BP
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/

Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3542. Re: HAM STUFF FOR SALE {scam??}

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 01:40:23 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <DqGdnWt1NshmSs3cRVn-hw@comcast.com>
Source record: 89263

http://www.usenet.com/newsgroups/rec.radio.amateur/msg00263.html

A search of google groups shows a large number of wanted/fs ads from him.
Pages and pages.
--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3543. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 02:26:01 UTC
From: Knarf <ve6cb@NOSPAM.telus.net>
Message-ID: <Zo54d.65192$KU5.13681@edtnps89>
Source record: 89264

Yes, I like the idea of verification, and have heard some people are using it. Anyway I will keep bouncing for the next 3 or four months to see if it diminishes my spam input. I know it is trivial to dump it when it comes in -- which I do -- but it just bugs me that it exists.

73,

Frank

"Richard Clark" <kb7qhc@comcast.net> wrote in message news:ifpsk01qf8e64gs1bdqcb4t4m9ecbiql24@4ax.com...
> On Mon, 20 Sep 2004 03:12:56 GMT, "Knarf" <ve6cb@NOSPAM.telus.net>
> wrote:
>
> >What bothers me is how much of this junk eats bandwidth up, and would like
> >to find a way to eliminate it.
>
> Hi Frank,
>
> Simple: Encrypted email with public keys, or private keys to verify
> sender/recipient. The technology has been available for years (PGP),
> and the RSA algorithms are public domain now (and have been for a
> couple of years). It would kill the industry overnight just like the
> "don't call" list instituted last year. The problem is inertia, and
> Micro$oft wanting to do it their way (as if they had a clue about
> network security).
>
> 73's
> Richard Clark, KB7QHC

3544. Re: Iam in the prcess of putting a 80 mtr inverted V up

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 02:34:07 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <vqo1l0lrap14v9l86ctqfb4e3faa67oqj3@4ax.com>
Source record: 89265

On Wed, 22 Sep 2004 01:10:35 GMT, Irv Finkleman <finkirv@shaw.ca>
wrote:

>Lou W wrote:
>>
>> I have read conflicting reccomendations about feeding this with 450 ohm
>> ladder. 300, ohm twin lead or using coax with a balun.
>> Are the any resons to pick/or not use any othe the above systems? Also my
>> tuner is an MFJ 941-D and the rig is a Kenwood
>> TS680S. At some point I will upgrade the rig. Should I look for a better,
>> moderately priced, tuner to help as intend to work
>> as many bands a I am able. I will of course be playinhg with building and
>> testing may homebrew antenna in the future.IOW
>> is my tuner a POS or is it passable for the time being.
>> TIA
>> Lou KE6LZS
>
>An 80M inverted V will work just fine on all bands using your 941D. There
>is nothing wrong with the rig. The difference between expensive 450 ladder
>line and the cheapest 300 twin lead will be insignificant.

In the States, it's getting hard to find 300-ohm twinlead anymore.
450-ohm line might be his only choice for a balanced transmission
line.

bob
k5qwg

> I ran my
>inverted V for 13 years using cheapo twin lead and never had a problem
>with dust, rain, or anything that the naysayers can come up with. If you
>use coax and a balun you will only be good for 80M.
>
>Hope this helps...
>
>Irv VE6BP

3545. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 03:03:57 UTC
From: "Dogs, nothing but dogs !!" <A7375df2652@Hotmail.com>
Message-ID: <4150eb9f@post.usenet.com>
Source record: 89266

**** Post for FREE via your newsreader at post.usenet.com ****

Ref . News on CNN:
http://edition.cnn.com/2004/TECH/science/09/17/light.antenna.reut/index.html

PREFACE - history of this 'discussion'
"Richard Clark" appears to support K4WGE's
assertion:
>> This [CNN^] antenna was invented much earlier,
>> actually, as the compound eye of insects and
>> other arthropods. [And then he provided a link
>> to a crude drawing of an insect eye at nearly
>> macroscopic scale. <sigh>]

RC joined the poo-poo chant with "What's the difference in Truro?" His position isn't all that clear. He's maintained a small 'deniability' gap. Perhaps he will clearly state [YES/NO], without obfuscation, if he really does intend to support the above (incorrect) assertion.

My position is crystal clear. I think that there is some confusion between some nearly-macroscopic structural (non-optical) elements within an insect's eyes and the similarly shaped, but ~much~ smaller, carbon nanotube antennas. Insect eyes no more use 'antenna' elements than do human eyes.

We've also been sidetracked by the IR crowd - those that ignore the adjective 'visible' in the CNN article.

If anyone has any links to prior art 'visible' light scale antennas, then please post links. (That's about the third or fourth time for that plea...) As with George Jr, I don't think that even an offer of a $50,000 reward would help in the search.

back to our regular programming

"Richard Clark"
> There is a world of difference between nanotech conductors,
> especially carbon nanotubes, and conventional conductors.
> There is a world of similarity between nanotech conductors,
> and wetware as you describe it.

The above statements hardly constitutes a valid proof (even by the incredibly weak standards of the Internet) that insect eyes somehow represent 'prior art' for 'visible light antennas' (per CNN link at top) as asserted by K4WGE. Are you planning to provide any supporting links to support your apparent support of K4WGE's (incorrect) assertion ??? If you don't know, then when will you know?

"Richard Clark" continued:
> DNA... ...300 base pairs would be adequate for
> a quarterwave visible light structure.

I could quite reasonably ask, "So you really think that insect eyes use their DNA to directly sense light?" - but I won't. I will ask what point you're trying to support with that rather off-the-wall (*) comparison. (* off-the-wall because I don't believe that nature intends that DNA interact with visible light and I don't believe that it does. It's just silly and it doesn't support K4WGE's assertion in the slightest.)

"Richard Clarfucius" say:
> Trying to force Newtonian physics into a Quantum
> solution fails not in the application, but in the explanation.

Ah so Master (but it doesn't 'answer the mail').

Your post (as extracted above) fails to move your argument any further down the road.

-=-=-=

3546. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 03:19:26 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <JLmdnd215aKscs3cRVn-jQ@comcast.com>
Source record: 89267

I see the difference.
Perhaps it helps to explain that the carbon nanotubes are rather smaller
than the cells in the insect's eyes, and there's no lens involved.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3547. Re: Remote longwire & counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 09:01:01 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <8ie2l0dira4t129nbveupj0pgrlqkptlhj@4ax.com>
Source record: 89268

On Tue, 21 Sep 2004 13:40:31 GMT, Ken <cprstn54zz@att.net> wrote:

>What options do I have in bringing a longwire antenna and tuned
>counterpoise ground to my tuner -- in addition to using the terminals
>provided?
>
Let me restate the question. The antenna is more properly a random
wire. The counterpoise is a multiband counterpoise made of rotor cable
with a separate [folded] resonant path on every ham band of interest
(here, 80 and 60/160)

Most sources say a random wire antenna is a dipole with one leg being
ground. Iam trying to apply this principle.

If my ground is instead a resonant [half wavelength] multi-band
counterpoise, Why can't this be treated like a balanced antenna? I
would like the random wire to leave my attic for a 225 ft [horizontal]
run through the trees and for the counterpoise to hang down along the
side of the house, leaving from the same spot in the attic. It seems
to me that connecting these two leads to ladderline should be the same
RF-wise as if I had a standard dipole there -- albeit with 50% less
efficiency.

The ladderline would run 50 ft to a tuner. I am not sure whether to
use the balanced antenna terminals (thereby involving a built-in 4:1
balun), or the random wire terminal and ground.

If I am missing something, I can't figure out what it is.

If I am onto something, Does the counterpoise have to resonant? Can
it, too, be a long [folded] wire? I understand that in some vehicular
apps, the counterpoise is made this way.

I am interested in knowing how RF hot the ladderline will be. It
would be best if it worked the same way it works with a standard
double zepp -- with each leg's RF cancelling out the other.

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3548. Re: Fan dipole in attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 10:41:18 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <iFc4d.9961$n16.1009@newsread2.news.atl.earthlink.net>
Source record: 89269

In my attic I have a dipole cut to the middle of the 40m band. I use a Ten Tec antenna tuner with it and I can tune it for 15, 20, 30, and 40m with some success.

The last 8 feet of wire on each end actuallly bends 90 degrees because my space wasn't long enough to lay the thing out in a straight line.

I have used this antenna and earned QRP WAS in 1999, 2000, 2002, and I need 8 more for 2004. My best DX was Reunion Island on 30m about 2 years ago, I was using a Ten Tec Scout at 4w of output.

I crammed this antenna up in the peak of my roof, and I'd guess it's maybe 28 feet off the ground, maybe a little less.

My advice would be to try it. You can always yank it down if it doesn't work for you. Avoid any metal you can up there.

73

"Jack Twilley" <jmt+usenet@twilley.org> wrote in message news:86vfefv3q1.fsf@duchess.twilley.org...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> My new location has a short narrow attic with a traditional shape --
> gentle pitch from a raised ridge which crosses the house along the
> long axis, like a triangular prism. I have a fan dipole from my last
> location that I'd like to try to reuse. Will I be able to get away
> with putting the longest legs of the dipole along the center line,
> parallel to the ground, and then putting the shorter legs (what was
> once an inverted vee) angling towards the corners of the roof?
>
> center line
> V
> +-----------------+
> | 40mL |
> | 20mL * |
> | * | 10mL |
> | \ | * |
> | \ | / |
> | \|/ |
> | * |
> | /|\ |
> | / | \ |
> | * | \ |
> | 10mR | * |

> | * 20mR |
> | 40mR |
> +-----------------+
>
> I know "everything works", but this is likely to be the only antenna I
> can get up in time for the California QSO Party in a couple of weeks,
> so I'm hoping that it'll be "good enough".
>
> Thanks in advance for thoughts and suggestions.
>
> Jack.
> - --
> Jack Twilley
> jmt at twilley dot org
> http colon slash slash www dot twilley dot org slash tilde jmt slash
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.2.5 (FreeBSD)
>
> iD8DBQFBSHxrGPFSfAB/ezgRAlF2AKDlZVUIHttJjQdTOac19Zr6OuVVNwCgsi+k
> AlPCXS3+og+uEvELeTngSHw=
> =qYq4
> -----END PGP SIGNATURE-----

3549. Re: Fan dipole in attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 10:48:11 UTC
From: root <sparkzz@aol.com>
Message-ID: <fJc4d.91379$Np2.89839@bignews4.bellsouth.net>
Source record: 89270

Just curious -- are you using ladder line with that???

tnx
Ken
KD5ZCL

Brian - KB9BVN wrote:
> In my attic I have a dipole cut to the middle of the 40m band. I use a Ten
> Tec antenna tuner with it and I can tune it for 15, 20, 30, and 40m with
> some success.
>
> The last 8 feet of wire on each end actuallly bends 90 degrees because my
> space wasn't long enough to lay the thing out in a straight line.
>
> I have used this antenna and earned QRP WAS in 1999, 2000, 2002, and I need
> 8 more for 2004. My best DX was Reunion Island on 30m about 2 years ago, I
> was using a Ten Tec Scout at 4w of output.
>
> I crammed this antenna up in the peak of my roof, and I'd guess it's maybe
> 28 feet off the ground, maybe a little less.
>
> My advice would be to try it. You can always yank it down if it doesn't
> work for you. Avoid any metal you can up there.
>
> 73
>
>
>
> "Jack Twilley" <jmt+usenet@twilley.org> wrote in message
> news:86vfefv3q1.fsf@duchess.twilley.org...
>
>>-----BEGIN PGP SIGNED MESSAGE-----
>>Hash: SHA1
>>
>>My new location has a short narrow attic with a traditional shape --
>>gentle pitch from a raised ridge which crosses the house along the
>>long axis, like a triangular prism. I have a fan dipole from my last
>>location that I'd like to try to reuse. Will I be able to get away
>>with putting the longest legs of the dipole along the center line,
>>parallel to the ground, and then putting the shorter legs (what was
>>once an inverted vee) angling towards the corners of the roof?
>>
>> center line
>> V
>>+-----------------+

```
>>| 40mL |
>>| 20mL * |
>>| * | 10mL |
>>| \ | * |
>>| \ | / |
>>| \|/ |
>>| * |
>>| /|\ |
>>| / | \ |
>>| * | \ |
>>| 10mR | * |
>>| * 20mR |
>>| 40mR |
>>+-----------------+
>>
>>I know "everything works", but this is likely to be the only antenna I
>>can get up in time for the California QSO Party in a couple of weeks,
>>so I'm hoping that it'll be "good enough".
>>
>>Thanks in advance for thoughts and suggestions.
>>
>>Jack.
>>- --
>>Jack Twilley
>>jmt at twilley dot org
>>http colon slash slash www dot twilley dot org slash tilde jmt slash
>>-----BEGIN PGP SIGNATURE-----
>>Version: GnuPG v1.2.5 (FreeBSD)
>>
>>iD8DBQFBSHxrGPFSfAB/ezgRAlF2AKDlZVUIHttJjQdTOac19Zr6OuVVNwCgsi+k
>>AlPCXS3+og+uEvELeTngSHw=
>>=qYq4
>>-----END PGP SIGNATURE-----
>
>
>
```

3550. Re: Fan dipole in attic

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 10:55:09 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <hSc4d.9966$n16.8627@newsread2.news.atl.earthlink.net>
Source record: 89121

Nope. I feed it with RG8X Coax.

At the feed point I do have it looped 6 or 7 times and taped together in an attempt to keep the RF off the shield.

I am amazed at how well this antenna works sometimes.

I have accumulated 47 DXCC entities on it in the last 4 years or so. It's no DX dream, that's for sure, but I can sit down anyday or night and have QSO's with it.

I run a K1 at 5w about 95% of the time, all CW.

I need to figur eout a way to stealth up a 80m antler sometime. Maybe next year.

73 de KB9BVN

"root" <sparkzz@aol.com> wrote in message
news:fJc4d.91379$Np2.89839@bignews4.bellsouth.net...
> Just curious -- are you using ladder line with that???
>
> tnx
> Ken
> KD5ZCL
>
> Brian - KB9BVN wrote:
> > In my attic I have a dipole cut to the middle of the 40m band. I use a
Ten
> > Tec antenna tuner with it and I can tune it for 15, 20, 30, and 40m with
> > some success.
> >
> > The last 8 feet of wire on each end actuallly bends 90 degrees because
my
> > space wasn't long enough to lay the thing out in a straight line.
> >
> > I have used this antenna and earned QRP WAS in 1999, 2000, 2002, and I
need
> > 8 more for 2004. My best DX was Reunion Island on 30m about 2 years
ago, I
> > was using a Ten Tec Scout at 4w of output.
> >
> > I crammed this antenna up in the peak of my roof, and I'd guess it's
maybe
> > 28 feet off the ground, maybe a little less.
> >

> > My advice would be to try it. You can always yank it down if it doesn't
> > work for you. Avoid any metal you can up there.
> >
> > 73
> >
> >
> >
> > "Jack Twilley" <jmt+usenet@twilley.org> wrote in message
> > news:86vfefv3q1.fsf@duchess.twilley.org...
> >
> >>-----BEGIN PGP SIGNED MESSAGE-----
> >>Hash: SHA1
> >>
> >>My new location has a short narrow attic with a traditional shape --
> >>gentle pitch from a raised ridge which crosses the house along the
> >>long axis, like a triangular prism. I have a fan dipole from my last
> >>location that I'd like to try to reuse. Will I be able to get away
> >>with putting the longest legs of the dipole along the center line,
> >>parallel to the ground, and then putting the shorter legs (what was
> >>once an inverted vee) angling towards the corners of the roof?
> >>
> >> center line
> >> V
> >>+-----------------+
> >>| 40mL |
> >>| 20mL * |
> >>| * | 10mL |
> >>| \ | * |
> >>| \ | / |
> >>| \|/ |
> >>| * |
> >>| /|\ |
> >>| / | \ |
> >>| * | \ |
> >>| 10mR | * |
> >>| * 20mR |
> >>| 40mR |
> >>+-----------------+
> >>
> >>I know "everything works", but this is likely to be the only antenna I
> >>can get up in time for the California QSO Party in a couple of weeks,
> >>so I'm hoping that it'll be "good enough".
> >>
> >>Thanks in advance for thoughts and suggestions.
> >>
> >>Jack.
> >>- --
> >>Jack Twilley
> >>jmt at twilley dot org
> >>http colon slash slash www dot twilley dot org slash tilde jmt slash

> >>-----BEGIN PGP SIGNATURE-----
> >>Version: GnuPG v1.2.5 (FreeBSD)
> >>
> >>iD8DBQFBSHxrGPFSfAB/ezgRAlF2AKDlZVUIHttJjQdTOac19Zr6OuVVNwCgsi+k
> >>AlPCXS3+og+uEvELeTngSHw=
> >>=qYq4
> >>-----END PGP SIGNATURE-----
> >
> >
> >

3551. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 13:06:28 UTC
From: richardharrison@webtv.net
Message-ID: <18518-415178D4-24@storefull-3251.bay.webtv.net>
Source record: 89122

Antennas for Light wrote:
"Researchers...have invented an antenna that captures visible light in much the same way that radio antennas capture radio waves..."

The cell that powers my calculator has been doing that, converting wave motion to electricity, for years. The cell forms a diode so its output is d-c.

Best regards, Richard Harrison, KB5WZI

3552. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 15:08:08 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <4JWdnVTm097bCMzcRVn-gA@comcast.com>
Source record: 89123

Completely different effect.

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3553. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 15:33:33 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <gXg4d.234$Xy5.62@fe61.usenetserver.com>
Source record: 89124

I was unable to retreive any of the documents on the LOFAR website, so I can't comment on the details.

I do see that the Sky and Telescope article mentioned the work at Ohio State. This one is working at S band (3 GHz +/-) and is currently detecting TVRO satellites and the solar emissions. I'm not sure what type of antenna they are using, however.

I built the first prototype of the OSU system some 17 years ago, by the way, as my Master's thesis, so I think I am qualified to comment on this. The bandwidth of the LOFAR system is huge, percentage wise. There are a number of problems that have to be overcome to get this to work in addition to the RFI problem. I was able to ignore most of these problems in the prototype because I used a very narrow bandwidth (just a few kHz). Unfortunately, my thesis is not available on-line, but there is some information on this and the current desgin at www.bigear.org.

Are they perhaps using circular polarization? There is an advantage to this as most of the 'noise like' signals are randomly polarized.

As far as the VHF signal interference is concerned, it can be shown that most VHF signals arrive at elevation angles of 15 degrees or less, so perhaps they designed the antenna elements to have nulls at this angle.

--
Jim
N8EE

to email directly, send to my call sign at arrl dot net
"Fractenna" <fractenna@aol.com> wrote in message
news:20040915163906.13201.00000612@mb-m11.aol.com...
> >See article at
> >http://skyandtelescope.com/news/article_1334_1.asp
>
> My educated opinions on this matter are as follows--thisreport is very
sugar
> coated: The Dutch decision broke up the original consortium and, in my
opinion,
> severely degraded the success as originally outlined. The astronomical
> community is not happy: this is the first time that an international
astronomy
> community has worked against itself.
>
> This is NOT 'LOFAR' as defined, but a highly compromised derivative
version.

> Holland is a very poor site location for these frequencies, because of the
high
> population areas and extant HF/VHF use. Also, the cross polarization
inverted
> V element is a poor antenna for the relevant passband.
>
> A good link on the original plan is:
>
> http://www.lofar.org
>
> 73,
> Chip N1IR

3554. Re: Remote longwire & counterpoise?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 16:22:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vm73l05hcubtasrhhlh1fl9k1r21n7r1jq@4ax.com>
Source record: 89125

On Wed, 22 Sep 2004 09:01:01 GMT, Ken <cprstn54zz@att.net> wrote:

>balanced antenna <> 225 ft [horizontal] +counterpoise to hang down along the
>side of the house

Hi Ken,

Your question also contains the answer as noted above. This is a
formal definition in response which in an of itself does not negate a
practical outcome.

> leaving from the same spot in the attic. It seems
>to me that connecting these two leads to ladderline should be the same
>RF-wise as if I had a standard dipole there

Reasonable assumption, but there is nothing balanced about it that
confers the characteristics/benefits of being balanced. Balance is
with regard to two sides of a dipole, each in relation to ground. If
one of those two is intimately associated to ground (you qualify in
spades here), then the system is unbalanced throughout.

This gives rise to unbalanced currents AKA common mode. However,
common mode may pass unnoticed, and in such case it simply doesn't
matter. This balance is easily qualifiable visually: does each leg
offer symmetry to the other AND ground? Yours does not. There is
nothing fundamentally balanced about a long wire in the first place
irrespective of counterpoise treatments. This does not diminish any
perceived benefits of that counterpoise, but the counterpoise does not
confer balance as you describe it.

As to the matter of ladder line and its practicability. At this point
its choice is driven by the expectation where you anticipate large
mismatches and losses that attend them. Thus the ladder line answers
the problem of loss, otherwise it has no particular merit over other
methods. To respond directly to your statement above, yes you can
attach ladder line RF-wise as if you had a standard dipole.

73's
Richard Clark, KB7QHC

3555. Re: Iam in the prcess of putting a 80 mtr inverted V up

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 18:19:49 UTC
From: KA9CAR <ka9car@a_r_r_l_.net>
Message-ID: <cisfo8$2gin$1@news1.tribune.com>
Source record: 89126

I agree with Irv, I used 300 ohm tv line availabe at Radio Shack, Home Depot and Menards for 25 years, on an 80 meter dipole. I used several different tuners WITHOUT a Balun and fed the line directly. You can even put a couple of short leads on a PL259 and splice it to the Twin line if the only output your tuner has is an SO239.

For your next tuner, watch Ebay and buy a Johnson Matchbox for under $100. They will match most loads you are likely to encounter, and are designed for Balanced line.

I presently use some home made 450 line on a 60 meter (90 foot end to end) dipole, as that is what fits between my trees. I modified my Matchbox to make it load all bands with the 90 foot dipole, but you can get the same effect by changing feed line length if you have "problem bands".

Reg Edwards, program Dipole3 will let you calculate the difference in losses between the 300 and the 450 line using the actual hieght and length of your dipole.

http://www.btinternet.com/~g4fgq.regp/

KA9CAR

3556. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 18:34:24 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4151C5B0.3030405@psu.edu>
Source record: 89127

Richard Clark wrote:
> On Tue, 21 Sep 2004 16:18:07 -0400, Mike Coslo <mjc5remove@psu.edu>
> wrote:
>
>
>>We might check with our Canadian
>>friends on how their growing season has been affected.
>
>
> Hi Mike,
>
> Check the folks who pay for crop failures: the insurance industry.
>
> Won't be long before the red states (or is that states in the red?)
> are clamoring for insurance reform, tax rebates, corporate welfare,
> interest free loans, loan default amnesty, financial assistance...
>
> Hey wait! That is where all the homeland defense funds are going
> right now. New York City has been crying for help against terrorism
> for 3 years now, and the funding has been shuffled off to high
> terrorist profile sites like Paducah.

If they started voting for the "right" party, they would get more
money. simple.

> Well, if you ignore the ports, you can rest assured we won't have to
> worry about exports. If we don't worry about exports there will be
> more for all here (at depressed prices - think dust bowl). We won't
> have to worry about the trade deficit either because if we ain't
> sellin' we won't be buying (same port issue even if we did want a DVD
> player).
>
> I wonder how we're going to get the oil in? 15,000 mile sub-oceanic
> pipelines with Iraqi suicide frogmen every 6 feet? I suppose we could
> torch the beaches from all the spills and start a second "solar" power
> industry. Global warming? I'll show you warming, stay away from the
> surf!
>
> Political denial covers a lot of uncomfortable ills.

Sad but true.

- mike KB3EIA -

3557. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 18:42:05 UTC
From: Mike Coslo <mjc5remove@psu.edu>
Message-ID: <4151C77D.7060802@psu.edu>
Source record: 89128

H. Adam Stevens, NQ5H wrote:

> OB Ham topic. I operated W3YRQ's (Jerre I am sorry if I got your call wrong,
> it has been 34 years) KWM2 on 20 meter SSB from the Tektite II habitat.
> I believe Jerre and I are still the only hams to operate on the ocean floor.

Now THAT is cool! What was your setup?

- Mike KB3EIA -

3558. Re: Max power into 26 ga. longwire?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 19:02:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10l3j1e2q60ejb9@corp.supernews.com>
Source record: 89129

What effect do you expect a mismatch to have on the current or the
current distribution on the antenna?

Roy Lewallen, W7EL

Gary S. wrote:

> On Tue, 21 Sep 2004 09:04:00 -0500, "Dave VanHorn"
> <dvanhorn@cedar.net> wrote:
>
>
>>>But to be on the safe side, allow for a dissipation of 1 watt per foot
>>>length of dipole wire which will then get warm in the centre, somewhat
>>>above
>>>ambient, when in a slight breeze.
>>
>>But the current distribution isn't linear, and the loss is I^2R, so I would
>>think you'd have to know the max current, and work it that way.
>
>
> I don't think you should count on a perfect SWR match, either, and
> should size for some amount of mismatch.
>
> Worst case kind of thinking.
>
> Happy trails,
> Gary (net.yogi.bear)
> --
> at the 51st percentile of ursine intelligence
>
> Gary D. Schwartz, Needham, MA, USA
> Please reply to: garyDOTschwartzATpoboxDOTcom

3559. Re: HAM STUFF FOR SALE {scam??}

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 19:16:47 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <zck4d.85685$MQ5.12156@attbi_s52>
Source record: 89130

"Dave VanHorn" <dvanhorn@cedar.net> wrote in message
news:DqGdnWt1NshmSs3cRVn-hw@comcast.com...
>
> http://www.usenet.com/newsgroups/rec.radio.amateur/msg00263.html
>
> A search of google groups shows a large number of wanted/fs ads from him.
> Pages and pages.
> --
> KC6ETE Dave's Engineering Page, www.dvanhorn.org
> Microcontroller Consultant, specializing in Atmel AVR
>
These are the type of situtations the IRS likes to pursue.

3560. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 20:43:35 UTC
From: Dogs - nothing but dogs !! <A-Lot-of-crazy_folks-on-RRAA@Hotmail.com>
Message-ID: <4151e3f7@post.usenet.com>
Source record: 89131

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Harrison" mentioned:
> The cell that powers my calculator has been doing that,
> converting wave motion to electricity, for years. The cell
> forms a diode so its output is d-c.

Perhaps you could also take a moment to confirm that you understand the difference between an antenna and a solar cell. I know that you do - which makes your posting inexplicable.

-=-=-=

3561. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 20:49:15 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <E8adnZMCS6yneMzcRVn-rg@comcast.com>
Source record: 89132

Ever tried working HF on a solar cell? :)

--
KC6ETE Dave's Engineering Page, www.dvanhorn.org
Microcontroller Consultant, specializing in Atmel AVR

3562. New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 21:37:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cisra4gav1@hercules.btinternet.com>
Source record: 89133

Extract from program notes.

Program Name: NOTATRAP.exe Author: R.J.Edwards G4FGQ

A TWO-BAND ANTENNA WIRE LOADED WITH AN L & C PARALLEL-TUNED CIRCUIT

The LC parallel-tuned circuit is constructed exactly like an antenna trap. It
is located in the antenna wire and used as L or C loading at 2 other resonant
frequencies. Parallel-tuned circuits have a reactive impedance on either side
of resonance. On the low frequency side there is a +ve inductive reactance. On
the high frequency side there is a -ve capacitative reactance.

The purpose of the LC loading components is to detune the antenna wire from
its natural 1/4-wave resonant frequency. When the loading circuit is behaving
as an inductance the antenna resonant frequency is reduced. When the loading
circuit is behaving as a capacitor the antenna resonant frequency is increased.
The pair of resonant frequencies depend on the LC ratio, on wire length, and
on the location of the LC loading circuit along the wire.

For a given loading location along the wire and a given pair of resonant freq-
encies this program calculates the L and C loading-component values. The pair
of frequencies lie above and below the unloaded resonant frequency of the wire.
The LC circuit behaves as an ordinary trap at its own resonant frequency which,
by experiment, can sometimes be arranged to fall into a third amateur band. But
to calculate such a fortunate coincidence is beyond my elderly patience.

The program has a built in signal source which generates a wide-ranging
testing frequency which can be used to 'measure' the input impedance of the
antenna versus frequency, checking resonant frequencies and other antenna
characteristics.

Download program NOTATRAP from website below and run immediately.

....
Regards from Reg, G4FGQ

For Free Radio Design Software go to
http://www.btinternet.com/~g4fgq.regp
.....

3563. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 22:06:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l8t3l0drc74m0t267u43b7vqurpt13qcht@4ax.com>
Source record: 89134

On Wed, 22 Sep 2004 14:34:24 -0400, Mike Coslo <mjc5remove@psu.edu>
wrote:

>> Political denial covers a lot of uncomfortable ills.
>
> Sad but true.

Hi Mike,

I went to a talk last week featuring Philip Gold, a military forces
planner from the Marine Corps and prolific writer (800 articles) for
conservative think tanks like the Discovery Institute. His comment
describing the current administration:
"SUMOs - Screw Up, Move On"

73's
Richard Clark, KB7QHC

3564. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 22:16:56 UTC
From: fractenna@aol.com
Message-ID: <20040922181656.24246.00001035@mb-m02.aol.com>
Source record: 89135

>I do see that the Sky and Telescope article mentioned the work at Ohio
>State. This one is working at S band (3 GHz +/-) and is currently detecting
>TVRO satellites and the solar emissions. I'm not sure what type of antenna
>they are using, however.
>
>I built the first prototype of the OSU system some 17 years ago, by the way,
>as my Master's thesis, so I think I am qualified to comment on this. The
>bandwidth of the LOFAR system is huge, percentage wise. There are a number
>of problems that have to be overcome to get this to work in addition to the
>RFI problem. I was able to ignore most of these problems in the prototype
>because I used a very narrow bandwidth (just a few kHz). Unfortunately, my
>thesis is not available on-line, but there is some information on this and
>the current desgin at www.bigear.org.
>
>
>Are they perhaps using circular polarization? There is an advantage to this
>as most of the 'noise like' signals are randomly polarized.
>
>As far as the VHF signal interference is concerned, it can be shown that
>most VHF signals arrive at elevation angles of 15 degrees or less, so
>perhaps they designed the antenna elements to have nulls at this angle.
>
>--
>Jim
>N8EE
>
>to email directly, send to my call sign at arrl dot net
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20040915163906.13201.00000612@mb-m11.aol.com...
>> >See article at
>> >http://skyandtelescope.com/news/article_1334_1.asp
>>
>> My educated opinions on this matter are as follows--thisreport is very
>sugar
>> coated: The Dutch decision broke up the original consortium and, in my
>opinion,
>> severely degraded the success as originally outlined. The astronomical
>> community is not happy: this is the first time that an international
>astronomy
>> community has worked against itself.
>>
>> This is NOT 'LOFAR' as defined, but a highly compromised derivative
>version.

>> Holland is a very poor site location for these frequencies, because of the
>high
>> population areas and extant HF/VHF use. Also, the cross polarization
>inverted
>> V element is a poor antenna for the relevant passband.
>>
>> A good link on the original plan is:
>>
>> http://www.lofar.org
>>
>> 73,
>> Chip N1IR

Hi Jim,

I am confused: are you saying that my comments contain errors? If so, what is incorrect?:-)

Yes; OSU masters students in antennas are very good. I have one working for me right now.

73,
Chip N1IR

3565. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 22:46:44 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040922184644.22172.00000919@mb-m18.aol.com>
Source record: 89136

>
>Here is an audio file of an interview with Robert Vincent; it's the
>second on the list. Click on the "Lofi" button and play with
>RealPlayer or Windows Media Player.
>
>http://www.ampcast.com/music/11261/music.php
>
>
>
>
>

yep, yep, what a comedy!

This guy is a jerk, has no clue about workings of antennas.
I tried to listen to this joker, but gave up after his statement that he managed (BS) to get the current accross the loaded radiator (against laws of physics) to be constant (with loading coils and helix inserted) and then he states (rightly) that efficiency of the antenna is proportional to the integrated current curve. Then the miracle: his shortened antenna of about 1/3 length over 1/4 wave vertical has the same effciency as (2/3 longer, rest of the curve) full size radiator. Shorter curve - same area? Clueless in ....
Looks like the cafeteria technician and physics department of URI are on the same wavelength as "Done" Rather. Giving amateurs and University bad name, setting themselves as a target for ridicule. I am glad I didn't send my kids to URI :-)

Oh well,

Yuri, K3BU.us

3566. Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 22:50:11 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040922185011.22172.00000920@mb-m18.aol.com>
Source record: 89137

How can I print wire list or table from EZNEC?

Yuri, K3BU.us

3567. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 23:18:47 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <rLn4d.7364$gG4.2337@newsread1.news.pas.earthlink.net>
Source record: 89138

"Mike Coslo" <mjc5remove@psu.edu> wrote in message
news:4151C77D.7060802@psu.edu...
> H. Adam Stevens, NQ5H wrote:
>
> > OB Ham topic. I operated W3YRQ's (Jerre I am sorry if I got your call
wrong,
> > it has been 34 years) KWM2 on 20 meter SSB from the Tektite II habitat.
> > I believe Jerre and I are still the only hams to operate on the ocean
floor.
>
>
> Now THAT is cool! What was your setup?
>
> - Mike KB3EIA -
>
>
KWM2, SB220 in the habitat. Hy Gain 14AVQ on a barge on the surface.
Worked great!
SCUBA down to the shack. What fun.
Life's been somewhat boring since Tektite.
73
H.
NQ5H

3568. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 23:19:33 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <9Mn4d.7365$gG4.4624@newsread1.news.pas.earthlink.net>
Source record: 89139

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:l8t3l0drc74m0t267u43b7vqurpt13qcht@4ax.com...
> On Wed, 22 Sep 2004 14:34:24 -0400, Mike Coslo <mjc5remove@psu.edu>
> wrote:
>
> >> Political denial covers a lot of uncomfortable ills.
> > >
> > > Sad but true.
>
> Hi Mike,
>
> I went to a talk last week featuring Philip Gold, a military forces
> planner from the Marine Corps and prolific writer (800 articles) for
> conservative think tanks like the Discovery Institute. His comment
> describing the current administration:
> "SUMOs - Screw Up, Move On"
>
> 73's
> Richard Clark, KB7QHC

All too sad, all too true.
73
H., NQ5H

3569. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 23:52:40 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <cfo4d.939$nj.432@newssvr13.news.prodigy.com>
Source record: 89140

Yuri Blanarovich wrote:

> How can I print wire list or table from EZNEC?
>
> Yuri, K3BU.us

Good question- also print for sources, and loads and perhaps
all on the same page ?? Only work-around I have is
a program called " Screen Shot ", but that has its own set
of headaches-- Prints the WHOLE SCREEN- not just the dialog
on the screen you want to view !! Don't think these are just
text files for this program !! Would be a handy addition!
Jim NN7K

3570. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-22 23:56:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1444l05c0t5qjagei7qb9d0vdgk0t8p03s@4ax.com>
Source record: 89141

On 22 Sep 2004 22:50:11 GMT, k3bu@aol.comNoUsama (Yuri Blanarovich)
wrote:

>How can I print wire list or table from EZNEC?
>
>Yuri, K3BU.us

Hi Yuri,

Good question. We've always been able to input a wire list, but never
output one (except by transcription).

If it isn't too big, you can do a screen image capture and then print
the image.

73's
Richard Clark, KB7QHC

3571. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 00:23:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10l45rtocg1m171@corp.supernews.com>
Source record: 89142

Look in the EZNEC manual index under "Printing The Antenna Description". To see what the "Outputs" at the top of the topic means, click the Contents tab over the left window pane while you have the topic displayed in the right pane.

The three normally intelligent people posting on this thread weren't able to find this, and it's a question I'm frequently asked. Is there any way I can index it so people can find it more easily? What did you look under in the index before posting this question, and where did the two people responding look? Apparently people don't make the association between "antenna description" and "wires table".

Roy Lewallen, W7EL

Yuri Blanarovich wrote:
> How can I print wire list or table from EZNEC?
>
> Yuri, K3BU.us

3572. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 00:46:51 UTC
From: "aunwin@insightbb.com"
Message-ID: <X1p4d.240231$mD.1162@attbi_s02>
Source record: 89143

Reg,
Can this be conscrewed as a combination loop/.dipole?
It would appear that you can place the L/C circuit at the center of the dipole and fed either with a delta match or a capacitive /inductive coupled dipole for impedance purposes. Could not quite fathom from your notes what it was exactly. I made a 160M rotatable dipole last winter based on the above and used the radio auto tuner control to change the values on the L/C circuit to move up and down the band because of the resulting narrow bandwidth at any set frequency or band.
Art

"Reg Edwards" <g4fgq.regp@ZZZbtinternet.com> wrote in message
news:cisra4gav1@hercules.btinternet.com...
> Extract from program notes.
>
> Program Name: NOTATRAP.exe Author: R.J.Edwards G4FGQ
>
> A TWO-BAND ANTENNA WIRE LOADED WITH AN L & C PARALLEL-TUNED CIRCUIT
>
> The LC parallel-tuned circuit is constructed exactly like an antenna trap.
> It
> is located in the antenna wire and used as L or C loading at 2 other
> resonant
> frequencies. Parallel-tuned circuits have a reactive impedance on either
> side
> of resonance. On the low frequency side there is a +ve inductive
reactance.
> On
> the high frequency side there is a -ve capacitative reactance.
>
> The purpose of the LC loading components is to detune the antenna wire
from
> its natural 1/4-wave resonant frequency. When the loading circuit is
> behaving
> as an inductance the antenna resonant frequency is reduced. When the
loading
> circuit is behaving as a capacitor the antenna resonant frequency is
> increased.
> The pair of resonant frequencies depend on the LC ratio, on wire length,
and
> on the location of the LC loading circuit along the wire.
>
> For a given loading location along the wire and a given pair of resonant
> freq-

> encies this program calculates the L and C loading-component values. The
> pair
> of frequencies lie above and below the unloaded resonant frequency of the
> wire.
> The LC circuit behaves as an ordinary trap at its own resonant frequency
> which,
> by experiment, can sometimes be arranged to fall into a third amateur
band.
> But
> to calculate such a fortunate coincidence is beyond my elderly patience.
>
> The program has a built in signal source which generates a wide-ranging
> testing frequency which can be used to 'measure' the input impedance of
the
> antenna versus frequency, checking resonant frequencies and other antenna
> characteristics.
>
> Download program NOTATRAP from website below and run immediately.
> ----
> ....
> Regards from Reg, G4FGQ
> For Free Radio Design Software go to
> http://www.btinternet.com/~g4fgq.regp
> ....
>
>

3573. Re: DLM Antenna talk

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 01:27:17 UTC
From: fractenna@aol.com
Message-ID: <20040922212717.03602.00001187@mb-m04.aol.com>
Source record: 89144

With time, it is clear that the magnitude of the claimed novelty, versus the reality, is an unfortunate case of lack of information --this is my opinion-- based upon factual errors stated, and said, by Rob. He most certainly is not "a jerk". Seems like a sincere and dedicated fellow who has worked very hard on a very challenging problem. I regret that he has not made a sufficient case regarding novelty nor efficiency nor widebandedness: again--this is my opinion.

There is little that may be gleaned, moving forward, in the realm of antenna science: spurts in the past decade have, at least, milked the basic science dry. There is still fertile ground for application, a rich and satisfying endeavor upon which many here focus with rigour.

73,
Chip N1IR

3574. Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 04:50:18 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <6bl4l01sdh51pe9bpbbktfb51f924njgns@4ax.com>
Source record: 89145

I'm looking for a good antenna analyzer. Resonant frequency,
impedance +/- and magnitude. It'd be nice if it would also feed the
results to the computer for display/plot. It would be nice to have a
plot of the antenna characteristics on screen.

I'm somewhat familiar with the MFJ unit, but wonder what else is out
there other than the very expensive commercial units.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

3575. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 05:03:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <val4l055o16nfhtcs5uk9f68cr3qrs7232@4ax.com>
Source record: 89146

On Wed, 22 Sep 2004 17:23:22 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Apparently people don't make the association
>between "antenna description" and "wires table".

Hi Roy,

So it would seem.

When I open the currents window, I can go to the File menu selection
and perform "save as."

When I open the source data window, I can go to the File menu
selection and perform "save as."

When I open the load data window, I can go to the File menu selection
and perform "save as."

When I open the far field data window, I can go to the File menu
selection and perform "save as."

When I open the near field data window, I can go to the File menu
selection and perform "save as."

When I open the wires data window, I can NOT go to the File menu
selection and perform "save as."

This is a lack of symmetrical design.

When I go to the File menu of EZNEC, I can select "Import Wires from
ASCII Table."

When I go to the File menu of EZNEC, I can NOT select "Export Wires to
ASCII Table."

This is a lack of symmetrical design.

When I am twice frustrated in trying to find an operation that would
flow from similar program controls, it is not intuitive to seek it
further in what is called a "description."

I like my data separable and even though I am competent to the matter
of building automatic parsers to obtain the data I am interested in,
this is just another pain.

73's
Richard Clark, KB7QHC

3576. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 05:17:34 UTC
From: root <sparkzz@aol.com>
Message-ID: <rYs4d.56037$zT6.6407@bignews5.bellsouth.net>
Source record: 89147

Richard Clark wrote:
> On Tue, 21 Sep 2004 17:49:15 -0300, "Dogs, nothing but dogs !!"
> <s74h3dn387h@Hotmail.com> wrote:
>
>
>>The ball is firmly in your court to better my negative search results with a
>>link that clearly supports the position that you appear to be supporting
>>(insect eyes = antennas).
>
>
> Hi OM,
>
> There is a world of difference between nanotech conductors, especially
> carbon nanotubes, and conventional conductors. There is a world of
> similarity between nanotech conductors, and wetware as you describe
> it. In fact, one nanotechnology framework is the DNA molecule. 300
> base pairs would be adequate for a quarterwave visible light
> structure.
>
> Trying to force Newtonian physics into a Quantum solution fails not in
> the application, but in the explanation.
>
> 73's
> Richard Clark, KB7QHC
xx

3577. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 05:34:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8sn4l0t9c5ptp4vr1ronnnahg1m4s6bmj5@4ax.com>
Source record: 89148

On Thu, 23 Sep 2004 00:46:51 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>Reg,
>Can this be conscrewed
---- must :-) ------ not :-) :-) ------ laugh :-) :-) :-)

3578. Re: Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 08:57:13 UTC
From: Ralf Ballis - DL2MRB <rballis@gmx.de>
Message-ID: <ciu3d2$kc7$04$1@news.t-online.com>
Source record: 89149

There are a lot of units in the market a search at google wuld help.

Take a look at:

http://www.schomandl.com

For field aspects I would prefer the products of MFJ.

Regards,

Ralf

--
Vy 73 es 55 de Ralf, DL2MRB
E-Mail: dl2mrb@darc.de
Board: www.hamradioboard.de

3579. 'Mini' Coax

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 09:57:50 UTC
From: woodtownuk@aol.com
Message-ID: <20040923055750.13199.00001001@mb-m28.aol.com>
Source record: 89150

I've got a roll of coax that calls itself 'RF 8 MINI' (plus a description in Italian) on the drum, and 'RG 8 SUPER XX' - but no manufacturer - on the sheath.

Other RG8X coax I've used has always had a foam dielectric, but this stuff is very stiff.

Anyone know who's it is and some idea of its spec?

MTIA

Angus Graham, G3TXL

3580. Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 11:47:46 UTC
From: harshana@sumuthu.lk
Message-ID: <b2defa30.0409230347.5e754d0d@posting.google.com>
Source record: 89151

Hi all,

I want to make a simple antenna like the ones U see in cheap remote control toys. Can anyone give me a eqation that helps me to get the wire length when the freq. is given (I'm looking at freqs like 400MHz ~ 900MHz)?

Thanks in advance,
73,
Harshana

PS: I don't have amature radio license, but my brother - 4S7NR had. Unfortunately he had to leave us (he was shot in Iraq while working for ICRC in July 2003).

3581. N8WWM the felon cries when confonted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 11:50:06 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040923075006.376$Wq_-_@newsreader.com>
Source record: 89152
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> "KC8QJP" <KC8QJP@crisco.net> wrote in message
> news:<2re39cF18vkq2U1@uni-berlin.de>...
> > im crisco kathy and i approve this message
> > "I ain't George either" <KennelMaster@not-here.com> wrote in message
> > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
> > >
> > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> > > news:20040920090055.723$YO@newsreader.com...
> > >> Article 3 of 1989 in rec.radio.amateur.antenna
> > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
> > >>
> > >> Steveo <moparholic@hotmail-nospam.com>
> > >> Organization: passionate jerk
> > >> Today 8:40 AM
> > >>
> > >> References: [google.com]
> > >>
> > >> Yep, that's the same crook. Doug Adair (N8WWM)
> > >>
> > >> btw..your url link for his antenna scam didn't work. Here it is:
> > >>
> > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
> > >>
> > >> zerobeatradio@yahoo.com (zerobeat) wrote:
> > >>> WOW! Thanks for the heads-up! That's the same felonious loser that
> > >>> hawks antenna's under the guise of "superskyhooks".
> > >>>
> > >>> http://tinyurl.com/3nxlt
> > >>>
> > >>> N8WWM Doug Adair.
> > >>>
> > >>> What a loser!
> > >>>
> > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
> > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
> > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
> > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post on
> > >>> > > > keyclownism
> > >>> > > > now I understand what motivates these guys and why they act
> > >>> > > > the way
> > >>> > > > they do. It is always fun to watch them kind of like animals

> > >>> > > > in the
> > >>> > > > zoo or hamsters in a cage. I have a pet keyclown his name is
> > >>> > > > Twisty
> > >>> > > > and he wont obey commands, wont make sense, stirs up the
> > >>> > > > other keyclowns, etc. Is there some special book I Should
> > >>> > > > read to understand Twisty?
> > >>> > > >
> > >>> > > > Thanks again.
> > >>> > >
> > >>> > > You are welcome. See, people?
> > >>> > >
> > >>> > That's priceless! You're talking to yourself and handing out
> > >>> > Psychiatric advice. Did your court ordered shrink teach you that
> > >>> > trick?
> > >>> >
> > >>> > COUNT PARTY DESCRIPTION ABBREV.
> > >>> > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS
> > >>> > F4
> > >>> >
> > >>> > Defendant to seek mental health counseling
> > >>> >
> > >>> > Pursuant to the request of probation a capias is
> > >>> > ordered issued. Bond is set at $5,000.00 no 10%.
> > >>> >
> > >>> > Probation as ordered by this Court on April 11, 1997
> > >>> > is ordered continued with the following added
> > >>> > conditions: 1) Seek and maintain gainful employment;
> > >>> > 2) Defendant to seek mental health counseling; 3)
> > >>> > Execute wage withholding agreement.
> > >>> >
> > >>> > JUDGE JAMES D. JENSEN
> > >>> > PARTY : D1 - ADAIR DOUGLAS W
> > >>> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $ THRU9/23/03
> > >>> > SENTENCE C-184-502
> > >>> > PARTY : D1 - ADAIR DOUGLAS W
> > >>> > 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
> > >>> > terminated unsuccesfully
> > >>> > PARTY : D1 - ADAIR DOUGLAS W
> > >
> > > And here we have some feedback from someone he did business with on
> > > Ebay:
> > >
> > > Won auction- agreed to terms-left neg about fees. no honor/r
> > > integrity.dishonest
> > > bpc_electronics (11144) May-03-01 03:42 1234227431
> > > Follow-up by bpc_electronics: Underage middle-schooler. Watch for
> > > viruses in his emails.Signs U up 4 spam list
> > > Reply by superskyhooks: Email me for flist of Ebayers this guy
> > > has ripped off...
> > >

> > >
> > >
> > > Doesn't sound like our Dogie, does it? :-)
> > >
> > >
>
> How did we KNOW that the keyclowns could not resist a chance to fall
> over themselves with attempts to defame, insult and threaten? How did
> we KNOW?
>
> Look at their history...they know they are wrong to be keyclowns, so
> they cannot actually defend their position.
>
Oh that's priceless! A convicted felon child abuser preaching about
what's right or wrong.

PKB much, felon boi?

3582. Re: Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 13:48:58 UTC
From: larry d clark <buddycl@swbell.net>
Message-ID: <evA4d.562$q67.199@newssvr11.news.prodigy.com>
Source record: 89153

Roger Halstead wrote:
> I'm looking for a good antenna analyzer. Resonant frequency,
> impedance +/- and magnitude. It'd be nice if it would also feed the
> results to the computer for display/plot. It would be nice to have a
> plot of the antenna characteristics on screen.
>
> I'm somewhat familiar with the MFJ unit, but wonder what else is out
> there other than the very expensive commercial units.
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair)
> www.rogerhalstead.com

quick and dirty mesurements i use mfj 259,
however i use a HF-VIA when i want to print/save
plots etc. see them at:
http://www.aea-wireless.com/products.htm

larry
kd5foy

3583. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 14:07:54 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <XMA4d.342$Nx2.210@fe39.usenetserver.com>
Source record: 89154

"Fractenna" <fractenna@aol.com> wrote in message
news:20040922181656.24246.00001035@mb-m02.aol.com...
>
> I am confused: are you saying that my comments contain errors? If so, what
is
> incorrect?:-)
>
> Yes; OSU masters students in antennas are very good. I have one working
for me
> right now.
>
> 73,
> Chip N1IR

No, Chip.

I do not see any errors in your comments.

What I was saying was that building such a system as originally described is a daunting task. There are many problems to overcome, one of which is getting an antenna to work over a 25: 1 bandwidth with reasonably constant performance. Another is that the pattern of the array will change tremendously over the same bandwidth, but this can be "fixed" by using only part of the array at higher frequencies.

Maybe that is why it was "broke up"? Also keep in mind the reputation of news outlets as to technical accuracy.

My Maser's wasn't so much in antennas (although I did do a bunch of research to identify the problems and propose solutions), but more at the systems level to show how digital signal processing can be used to solve previously "impossible" problems. I recall that at the time the experts in Radio Astronomy thought the idea wouldn't work at all.
--
Jim
N8EE--

to email directly, send to my call sign at arrl dot net

3584. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 15:13:57 UTC
From: fractenna@aol.com
Message-ID: <20040923111357.23542.00000930@mb-m18.aol.com>
Source record: 89155

>What I was saying was that building such a system as originally described is
>a daunting task. There are many problems to overcome, one of which is
>getting an antenna to work over a 25: 1 bandwidth with reasonably constant
>performance.

That's do-able.

Another is that the pattern of the array will change
>tremendously over the same bandwidth, but this can be "fixed" by using only
>part of the array at higher frequencies.
>

Yes. Actually not an element problem, but a problem with fixed height above ground; ground characertistics; mutual coupling; and element spacing--I am sure you know this; others might not.

>Maybe that is why it was "broke up"? Also keep in mind the reputation of
>news outlets as to technical accuracy.
>
>
>My Maser's wasn't so much in antennas (although I did do a bunch of research
>to identify the problems and propose solutions), but more at the systems
>level to show how digital signal processing can be used to solve previously
>"impossible" problems. I recall that at the time the experts in Radio
>Astronomy thought the idea wouldn't work at all.

They were wrong; you and Bernard Steinberg (at Valley Forge/UPenn) showed otherwise:-) BTW, I read your thesis about 10 years ago.Nice work. Others might also like to know that a synopsis isup on the NAAPO site.

I think the Euro folks are too jazzed by the computational technology end and have lost sight of the overall goal. That is my personal opinion.

73,
Chip N1IR

3585. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 15:47:24 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <ciur6c$s3s$1@sparta.btinternet.com>
Source record: 89156

"aunwin" wrote -
> Reg,
> Can this be conscrewed as a combination loop/.dipole?

==========

Aunwin, it would be impolite of me not to reply to your direct question. But for ages, on and off, I have tried at regretably increasing intervals, entirely unsuccessfully, to understand what your combination loop/dipole is all about.

So although YOU may somehow manage to construe some sort of relationship between a loop/dipole, whatever it is, and a lumped LC circuit inserted in a random length antenna wire, I'm afraid I'm in great difficulty.

In view of the amount of work involved, and the likelihood of it being fruitless, I propose for the time being to leave the matter in my pending tray and pour myself a glass of Bordeaux Claret. If unfamiliar with the beautiful deep red liquid you may like to try a glass yourself. It does help.

I'm very sorry that at present I'm unable to be of more assistance in your quest for recognition.

Yours, Reg, G4FGQ.

3586. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 15:47:24 UTC
From: richardharrison@webtv.net
Message-ID: <18520-4152F00C-30@storefull-3251.bay.webtv.net>
Source record: 89157

A Lot Of Crazy Folks wrote:
"Perhaps you could also take a moment to confirm that you understand the difference between an antenna and a solar cell."

Reciprocity rules antenna action. I`m not sure electricity through a solar cell will cause it to emit light.

Electricity does not travel through a void. Fields travel through voids.

A radio antenna is a transducer that converts between r-f fields and r-f electricity.

A solar cell is a transducer that converts between light fields and d-c electricity.

Radio waves and light waves are EM fields that differ in frequency.

Best regards, Richard Harrison, KB5WZI

3587. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 16:37:26 UTC
From: "aunwin@insightbb.com"
Message-ID: <9ZC4d.352560$8_6.128436@attbi_s04>
Source record: 89158

Reg,
You emphasise that "it is not a trap", a trap being a loop circuit that provides a desired low impedance path and a blocking high impedance for another band. You go on to say that the circuit you refer to allows all of the antenna to be used for both bands! Thus the L/C loop must provide a low impedance path on BOTH bands according to your statement which is certainly different to a "trap".
From your statements I thus see your L/C cuircuit as a "loop" which can be placed at an apropriate point in a radiating element.
Les Moxon refers to a similar antenna in his book where the loop is placed in the center of a dipole and which he calls a resonator having a capacitor and inherrent inductance.
It was Moxons antenna ,which is what I refer to as a combination loop /dipole antenna, that illustrates the use of an L/C circuit in antennas and what I used as a basis for my 160M antenna which worked quite well. Thus it was your own comments that instigated the original question.
Hopefully when you read this your mind will not be in a befuddled state created by claret and before you waddle of to the local pub so that you can respond without sarcasm
Best Regards
Art

> "aunwin" wrote -
> > Reg,
> > Can this be conscrewed as a combination loop/.dipole?
>
> ====================================
>
> Aunwin, it would be impolite of me not to reply to your direct question. But
> for ages, on and off, I have tried at regretably increasing intervals,
> entirely unsuccessfully, to understand what your combination loop/dipole is
> all about.
>
> So although YOU may somehow manage to construe some sort of relationship
> between a loop/dipole, whatever it is, and a lumped LC circuit inserted in a
> random length antenna wire, I'm afraid I'm in great difficulty.
>
> In view of the amount of work involved, and the likelihood of it being
> fruitless, I propose for the time being to leave the matter in my pending
> tray and pour myself a glass of Bordeaux Claret. If unfamiliar with the

> beautiful deep red liquid you may like to try a glass yourself. It does
> help.
>
> I'm very sorry that at present I'm unable to be of more assistance in your
> quest for recognition.
> ----
> Yours, Reg, G4FGQ.
>
>

3588. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 16:42:13 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <C1D4d.8$qL3.7@fe39.usenetserver.com>
Source record: 89159

Some more "Trivia" for you and other interested parties....

The actual idea was conceived by Dr. Robert S. Dixon W8ERD, who at the time was Assitant Director of the Ohio State RadioObservatory (Big Ear) and Director of the Academic Computer Center. I was working there as a Graduate Research Assistant (official title) and Chief Engineer (unofficial title) and had not yet decided on a thesis topic. He was wondering if it would be possible to digitize the signals at each antenna element in an array and then, through digital signal processing, form all possible beams in all directions simultaneously. And the rest is history, as the saying goes.

Also, I had previously read the book Imperial Earth by Arthur C. Clark, where he describes a space based array that could look in all directions simultaneously. He called it "Argus", and I thought that we should use the same name for our system. My prototype, however, was called a Radio Camera since the basic idea was to form a picture of the RF environment, and the name Argus is now being used for the present system at OSU (not to be confused with the system that uses satellite TV dishes at many locations).

You'll get a laugh out of this... My original system used a PDP-11/40 with a whopping 10 MB of hard disk. I had the whole thing to myself as exclusive user. Even at that it was too slow (even with a 10 kHz signal bandwidth), so I collected the raw data and processed it off-line. I used weather radio stations at 162.55 MHz as my sources since they all run the same power and same antennas. Any differences in signal would be due to propagation and distance.

The basic idea of Argus is to be able to look in all directions at the same time, thereby increasing the chance of detecting transient signals. Big Ear had detetected some transients (the most famous being the WOW! signal) mainly from the direction of the galactic poles, but considering that it would take Big Ear several years to survey the entire sky the detection of such transient signals is pure luck. An Argus system, however, can survey the entire sky (by this I mean what is visible from a given location---you would need one in space to see everything) in one day, theoreticaly.

--
Jim
N8EE

>

3589. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 16:51:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tdt5l0pi0eth4muc3ifc3a3k43mtar16jo@4ax.com>
Source record: 89160

On Thu, 23 Sep 2004 10:47:24 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>A Lot Of Crazy Folks wrote:
>"Perhaps you could also take a moment to confirm that you understand the
>difference between an antenna and a solar cell."
>
>Reciprocity rules antenna action. I`m not sure electricity through a
>solar cell will cause it to emit light.
>

Hi Richard,

In support of your veiled supposition, yes a solar cell will emit light. Of course a Lot Of Crazy Folks will then bluster in outrage that IR is not light. As Thoreau would posit: "A foolish consistency is the hobgoblin of little minds." The greater consistency is found in that a solar cell responds to the 90% of the sun's spectrum that is unseen.

Pick up any LED (which is visible light, I will leave that determination to the individual), connect a meter to it, and point the LED at a light source (which is visible light, I will leave that determination to the individual), and low a potential will be developed (typically the commonplace 0.7V, but this varies with LED color). I have also observed this in common diodes - LEDs merely have optimized their junction for maximum visual exposure.

There is nothing in this to suggest that efficiency follows reciprocal use. The hobgoblins would be loath to admit that the light bulb also serves as a light detector - even if poorly (but superbly for RF Power level measurement).

73's
Richard Clark, KB7QHC

3590. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 17:10:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8sv5l09fo6u31q6of3f354197gfh7arjqo@4ax.com>
Source record: 89161

On 23 Sep 2004 04:47:46 -0700, harshana@sumuthu.lk (Harshana) wrote:

>Hi all,
>
>I want to make a simple antenna like the ones U see in cheap remote
>control toys. Can anyone give me a eqation that helps me to get the
>wire length when the freq. is given (I'm looking at freqs like 400MHz
>~ 900MHz)?

Hi Harshana,

The simple, conceptual answer is that length is one fourth (ï¿½) of the wavelength you wish to use. To get the wavelength, divide 300 by the number of MHz. This size of antenna requires a "counterpoise" of roughly the same dimension. An example is a plate or ground plane that is ï¿½ wavelength in any direction from the bottom of that antenna. You may notice that those cheap remote control toys probably do not exhibit this characteristic. However, if you remove the plastic shell and observe where the antenna connects, there is some conductor or PC board of enough length (and probably less) to serve.

The elaborate answer is that beyond the simple answer, you are optimizing the antenna to obtain the last 20% of the available efficiency. Optimization is NOT typically found in toys - however, it often does not make any difference (20% is unremarkable).

>PS: I don't have amature radio license, but my brother - 4S7NR had.
>Unfortunately he had to leave us (he was shot in Iraq while working
>for ICRC in July 2003).

Sorry that our political failures have intruded into your personal experience. However blighted our agenda is, the ICRC supports a mission that transcends the sentimental but cynical slogans of our administration.

73's
Richard Clark, KB7QHC

3591. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 17:16:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hs06l0hgp9pi86lhshmpc73p2dkue6u45t@4ax.com>
Source record: 89162

On Thu, 23 Sep 2004 17:10:16 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>To get the wavelength, divide 300 by the
>number of MHz.

I should have said the resulting number would the length in Meters.
For example with your
400MHz = 75cM
900MHz = 33cM
the elaborate answer would tend toward:
400MHz = 71 - 72cM
900MHz = 31 - 32cM

3592. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 17:48:58 UTC
From: fractenna@aol.com
Message-ID: <20040923134858.20420.00000081@mb-m01.aol.com>
Source record: 89164

>You'll get a laugh out of this... My original system used a PDP-11/40 with
>a whopping 10 MB of hard disk.

I still have my PDP10 programming manual. Jeez, I --AM-- OLD!:-)

Yes; Bob had a great idea.

I suspect it will take 30 years (from now) to do this properly, get all the birdies out; get a nice patch of land in Arizona or Utah; build the system;find ET's; and so on.

Pioneering doesn't seem like that to contemporaries. We all need lasik!

73,
Chip N1IR

3593. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 17:49:19 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <A0E4d.3937$%t3.837@lakeread01>
Source record: 89163

"Richard Clark" <kb7qhc@comcast.net> wrote

> Hi Harshana,
>
> Sorry that our political failures have intruded into your personal
> experience. However blighted our agenda is, the ICRC supports a
> mission that transcends the sentimental but cynical slogans of our
> administration.
>
> 73's
> Richard Clark, KB7QHC

Harshana, I'm sorry for your loss, *NOT* for anything the United States Government or our troops or our liberation of Iraq did. Some warped apolgetic whining socialist thinkers blame everything on America, or our government. You can however, thank America for everything your brother had a chance to do - to go help innocent people from which even Red Cross, Crescent Red Cross and all other relief agencies faced attack from by the islamic bastards that want to destroy all other ways of life but their own.

This group has fun with off-topic posts once and awhile, but we usually stay away from political garbage that infects most other lists. So Richard, if you will kindly put your sword away (or use it somewhere people go to bash our government and our president, which you so enjoy doing) then replies of this nature will also cease. And I'm sure everyone will be happeir and get back to antenna improvements.

Best regards,

Jack Painter
Virginia Beach VA

3594. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 18:53:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8tg3l0pnifcqs040gf9aag9d1d3pcg8i7k@4ax.com>
Source record: 89165

On Thu, 23 Sep 2004 13:49:19 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>So Richard, if
>you will kindly put your sword away

Hi Jack,

And remove your opportunity to swing a rusty razor blade? I notice
reciprocity rules even when resistance is offered. I also note the
irony of suppressing such statements as I offer to reduce the chatter,
by offering the increase of chatter in like statements as bait - you
caught this fish! ;-)

I am currently listening to a Lewis Lapham talk put on by our local
"Town Hall." He offers how our "mission" against terrorism was
blighted by the comedy of ceremony in "anointing" the head of the
office of Homeland Scrutiny.

During the swearing in, they wanted to emulate the literal act of
religious anointment, usually done with a sacred oil. Instead
Clarence Thomas smeared Crisco on Tom Ridge's forehead. In a
religious community this would be called a perversion. In a
pluralistic society it is called comedy, or in deference to the actual
consequences, a tragi-comedy.

To return to the neo-con Philip Gold's observation about the war in
Iraq (at that same "Town Hall" last week): "a total disaster of
historic proportions" led by a crew of social misfits.

In a meeting last night (nearby that same "Town Hall") we watched a
film "Unconstitutional" that showed the major crafters of the Patriot
Act (Both Republicans and Democrats in a bi-partisan and FULLY
endorsed bill) who stood up in outrage on the floor of the House and
Senate to protest the wholesale substitution of law. The act had been
wholly reprinted with widespread changes in text at 3:45 AM and voted
on at 11:45 AM. NONE of the text of law passed by committee was in
that bill. As the Republican in charge of the committee offered "no
one read the bill that was voted on." No one except for the members
from Georgia (Republican) and Oregon (Democrat) - presumably both
being noted "crypto-commies" (the quote of choice from a commencement
speech by Cheney).

73's
Richard Clark, KB7QHC

3595. 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 18:57:41 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <I0F4d.98$TY2.39@lakeread04>
Source record: 89166

Is there such an animal? I am going to use this rig totally portable (beach, backyard, woods, open field) and would like to make or purchase a tuned vertical for thirty. I will be using it with an oak hills portable cw rig. What do you think?

3596. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:08:13 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040923150813.07384.00001501@mb-m29.aol.com>
Source record: 89167

>
>The three normally intelligent people posting on this thread weren't
>able to find this, and it's a question I'm frequently asked. Is there
>any way I can index it so people can find it more easily? What did you
>look under in the index before posting this question, and where did the
>two people responding look? Apparently people don't make the association
>between "antenna description" and "wires table".
>
>Roy Lewallen, W7EL

Normally, print option should be included/listed under FILE or in this case under WIRES. It would also help to have SAVE AS in ascii file or whatever.

Richard outlines the idea of organizing the options well.

I actually got around it by using MultiNEC, into which one can import EZNEC data and then use it as a spreadsheet with print selection of the sheet. K7GCO asked me how to print wire list and that created the question.

Yuri, K3BU.us

3597. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:23:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10l68le5g3c8u27@corp.supernews.com>
Source record: 89168

And a 1" square solar cell is about 50,000 wavelengths on a side.

Roy Lewallen, W7EL

Richard Harrison wrote:

> A Lot Of Crazy Folks wrote:
> "Perhaps you could also take a moment to confirm that you understand the
> difference between an antenna and a solar cell."
>
> Reciprocity rules antenna action. I`m not sure electricity through a
> solar cell will cause it to emit light.
>
> Electricity does not travel through a void. Fields travel through voids.
>
> A radio antenna is a transducer that converts between r-f fields and r-f
> electricity.
>
> A solar cell is a transducer that converts between light fields and d-c
> electricity.
>
> Radio waves and light waves are EM fields that differ in frequency.
>
> Best regards, Richard Harrison, KB5WZI
>

3598. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:29:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10l69067vllv1bb@corp.supernews.com>
Source record: 89169

Thanks for the responses. The suggestions were constructive, and they confirmed my observation that some people will do just about anything, including newsgroup posting, to avoid looking in the manual.

Roy Lewallen, W7EL

3599. infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:29:57 UTC
From: Ron <dg1hvw@darc.de>
Message-ID: <41532435.1020709@darc.de>
Source record: 89170

hello all,
is there anybody who can give me detailt information about the
dimensions of a isotron-antenna for the 160m-band? any links or
homebrew-descriptions?
many tzhanks
Ron DG1HVW

3600. Re: N8WWM the felon cries when confonted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:31:38 UTC
From: keyklonzrnutjobs@yahoo.com
Message-ID: <586e7bbf.0409231131.3217dfff@posting.google.com>
Source record: 89171
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

Steveo <moparholic@hotmail-nospam.com> wrote in message
news:<20040923075006.376$Wq_-_@newsreader.com>...
> N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > "KC8QJP" <KC8QJP@crisco.net> wrote in message
> > news:<2re39cF18vkq2U1@uni-berlin.de>...
> > > im crisco kathy and i approve this message
> > > "I ain't George either" <KennelMaster@not-here.com> wrote in message
> > > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
> > > >
> > > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> > > > news:20040920090055.723$YO@newsreader.com...
> > > >> Article 3 of 1989 in rec.radio.amateur.antenna
> > > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
> > > >>
> > > >> Steveo <moparholic@hotmail-nospam.com>
> > > >> Organization: passionate jerk
> > > >> Today 8:40 AM
> > > >>
> > > >> References: [google.com]
> > > >>
> > > >> Yep, that's the same crook. Doug Adair (N8WWM)
> > > >>
> > > >> btw..your url link for his antenna scam didn't work. Here it is:
> > > >>
> > > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
> > > >>
> > > >> zerobeatradio@yahoo.com (zerobeat) wrote:
> > > >>> WOW! Thanks for the heads-up! That's the same felonious loser that
> > > >>> hawks antenna's under the guise of "superskyhooks".
> > > >>>
> > > >>> http://tinyurl.com/3nxlt
> > > >>>
> > > >>> N8WWM Doug Adair.
> > > >>>
> > > >>> What a loser!
> > > >>>
> > > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
> > > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> > > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
> > > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
> > > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post on
> > > >>> > > > keyclownism
> > > >>> > > > now I understand what motivates these guys and why they act

> > > >>> > > > the way
> > > >>> > > > they do. It is always fun to watch them kind of like animals
> > > >>> > > > in the
> > > >>> > > > zoo or hamsters in a cage. I have a pet keyclown his name is
> > > >>> > > > Twisty
> > > >>> > > > and he wont obey commands, wont make sense, stirs up the
> > > >>> > > > other keyclowns, etc. Is there some special book I Should
> > > >>> > > > read to understand Twisty?
> > > >>> > > >
> > > >>> > > > Thanks again.
> > > >>> > >
> > > >>> > > You are welcome. See, people?
> > > >>> > >
> > > >>> > That's priceless! You're talking to yourself and handing out
> > > >>> > Psychiatric advice. Did your court ordered shrink teach you that
> > > >>> > trick?
> > > >>> >
> > > >>> > COUNT PARTY DESCRIPTION ABBREV.
> > > >>> > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS
> > > >>> > F4
> > > >>> >
> > > >>> > Defendant to seek mental health counseling
> > > >>> >
> > > >>> > Pursuant to the request of probation a capias is
> > > >>> > ordered issued. Bond is set at $5,000.00 no 10%.
> > > >>> >
> > > >>> > Probation as ordered by this Court on April 11, 1997
> > > >>> > is ordered continued with the following added
> > > >>> > conditions: 1) Seek and maintain gainful employment;
> > > >>> > 2) Defendant to seek mental health counseling; 3)
> > > >>> > Execute wage withholding agreement.
> > > >>> >
> > > >>> > JUDGE JAMES D. JENSEN
> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
> > > >>> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $ THRU9/23/03
> > > >>> > SENTENCE C-184-502
> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
> > > >>> > 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
> > > >>> > terminated unsuccesfully
> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
> > > >
> > > > And here we have some feedback from someone he did business with on
> > > > Ebay:
> > > >
> > > > Won auction- agreed to terms-left neg about fees. no honor/r
> > > > integrity.dishonest
> > > > bpc_electronics (11144) May-03-01 03:42 1234227431
> > > > Follow-up by bpc_electronics: Underage middle-schooler. Watch for
> > > > viruses in his emails.Signs U up 4 spam list
> > > > Reply by superskyhooks: Email me for flist of Ebayers this guy

> > > > has ripped off...
> > > >
> > > >
> > > >
> > > > Doesn't sound like our Dogie, does it? :-)
> > > >
> > > >
> >
> > How did we KNOW that the keyclowns could not resist a chance to fall
> > over themselves with attempts to defame, insult and threaten? How did
> > we KNOW?
> >
> > Look at their history...they know they are wrong to be keyclowns, so
> > they cannot actually defend their position.
> >
> Oh that's priceless! A convicted felon child abuser preaching about
> what's right or wrong.
>
> PKB much, felon boi?

Cries? Heheheh...looks like you are the keyclown whining in your frustration. How does it feel to know that you are powerless to stop AKC dissent. There is nothing you can do, sidewalk sissy...nada...and we just keep proving it. Happy Thursday, maybe we SHOULD put you and sidewalk sissy Chukkee on pay per view....putya in a ring and have the judges decide the most limpwristed of the 2 of ya. HARDEEHARRHARRHARR. Man, the AKC could clean up by selling feminine hygene and baby toy ads on the show, not to mention auctioning off the winner's pink tights on ebay...woo hoo...I KNOW keyclowns would bid that sucker up!

3601. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:44:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <VIidnY9WWKpcus7cRVn-gg@crocker.com>
Source record: 89172

go to rat shack and buy a couple 25' rolls of hookup wire, put one vertical
and the others horizontal. hook the vertical one to the center of the coax
and the horizontal ones to the shield.... voila, instant vertical... trim to
make rig happier as needed.

"G. Doughty" <ki4bbl@cox.net> wrote in message
news:I0F4d.98$TY2.39@lakeread04...
> Is there such an animal? I am going to use this rig totally portable
> (beach, backyard, woods, open field) and would like to make or purchase a
> tuned vertical for thirty. I will be using it with an oak hills portable
> cw rig. What do you think?
>
>

3602. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:55:06 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <41532A1A.76F788D8@uci.edu>
Source record: 89174

Richard Clark wrote:
>
> On Thu, 23 Sep 2004 13:49:19 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >So Richard, if
> >you will kindly put your sword away
>
> Hi Jack,
>
> And remove your opportunity to swing a rusty razor blade? I notice
> reciprocity rules even when resistance is offered. I also note the
> irony of suppressing such statements as I offer to reduce the chatter,
> by offering the increase of chatter in like statements as bait - you
> caught this fish! ;-)

Everyone is entitled to their opinion. And some lack the common sense
to keep it to themselves.

ac6xg

3603. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 19:59:26 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <AWF4d.101$TY2.39@lakeread04>
Source record: 89173

Dave,
Thanks so much. One question, do I use a 25' section of pvc to keep it upright? Also, should I trim the vertical or the horizontals for swr?

Thanks
Greg

"Dave" <noone@nowhere.com> wrote in message news:VIidnY9WWKpcus7cRVn-gg@crocker.com...
> go to rat shack and buy a couple 25' rolls of hookup wire, put one vertical
> and the others horizontal. hook the vertical one to the center of the coax
> and the horizontal ones to the shield.... voila, instant vertical... trim to
> make rig happier as needed.
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> "G. Doughty" <ki4bbl@cox.net> wrote in message
> news:I0F4d.98$TY2.39@lakeread04...
> > Is there such an animal? I am going to use this rig totally portable
> > (beach, backyard, woods, open field) and would like to make or purchase a
> > tuned vertical for thirty. I will be using it with an oak hills portable
> > cw rig. What do you think?
> >
> >
>
>

3604. Re: N8WWM the felon cries when confonted

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 20:17:22 UTC
From: "I am not george, itoldyouiamnotiamnotgeorge are morons!" <KennelMaster@not-here.com>
Message-ID: <mbG4d.31189$1d6.22630@fe1.texas.rr.com>
Source record: 89175
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

"Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in message
news:586e7bbf.0409231131.3217dfff@posting.google.com...
> Steveo <moparholic@hotmail-nospam.com> wrote in message
> news:<20040923075006.376$Wq_-_@newsreader.com>...
>> N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
>> > "KC8QJP" <KC8QJP@crisco.net> wrote in message
>> > news:<2re39cF18vkq2U1@uni-berlin.de>...
>> > > im crisco kathy and i approve this message
>> > > "I ain't George either" <KennelMaster@not-here.com> wrote in message
>> > > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
>> > > >
>> > > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
>> > > > news:20040920090055.723$YO@newsreader.com...
>> > > >> Article 3 of 1989 in rec.radio.amateur.antenna
>> > > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
>> > > >>
>> > > >> Steveo <moparholic@hotmail-nospam.com>
>> > > >> Organization: passionate jerk
>> > > >> Today 8:40 AM
>> > > >>
>> > > >> References: [google.com]
>> > > >>
>> > > >> Yep, that's the same crook. Doug Adair (N8WWM)
>> > > >>
>> > > >> btw..your url link for his antenna scam didn't work. Here it is:
>> > > >>
>> > > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
>> > > >>
>> > > >> zerobeatradio@yahoo.com (zerobeat) wrote:
>> > > >>> WOW! Thanks for the heads-up! That's the same felonious loser
>> > > >>> that
>> > > >>> hawks antenna's under the guise of "superskyhooks".
>> > > >>>
>> > > >>> http://tinyurl.com/3nxlt
>> > > >>>
>> > > >>> N8WWM Doug Adair.
>> > > >>>
>> > > >>> What a loser!
>> > > >>>
>> > > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
>> > > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
>> > > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in message
>> > > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...

>> > > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post on
>> > > >>> > > > keyclownism
>> > > >>> > > > now I understand what motivates these guys and why they act
>> > > >>> > > > the way
>> > > >>> > > > they do. It is always fun to watch them kind of like
>> > > >>> > > > animals
>> > > >>> > > > in the
>> > > >>> > > > zoo or hamsters in a cage. I have a pet keyclown his name
>> > > >>> > > > is
>> > > >>> > > > Twisty
>> > > >>> > > > and he wont obey commands, wont make sense, stirs up the
>> > > >>> > > > other keyclowns, etc. Is there some special book I Should
>> > > >>> > > > read to understand Twisty?
>> > > >>> > > >
>> > > >>> > > > Thanks again.
>> > > >>> > >
>> > > >>> > > You are welcome. See, people?
>> > > >>> > >
>> > > >>> > That's priceless! You're talking to yourself and handing out
>> > > >>> > Psychiatric advice. Did your court ordered shrink teach you
>> > > >>> > that
>> > > >>> > trick?
>> > > >>> >
>> > > >>> > COUNT PARTY DESCRIPTION ABBREV.
>> > > >>> > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF DEPENDENTS
>> > > >>> > F4
>> > > >>> >
>> > > >>> > Defendant to seek mental health counseling
>> > > >>> >
>> > > >>> > Pursuant to the request of probation a capias is
>> > > >>> > ordered issued. Bond is set at $5,000.00 no 10%.
>> > > >>> >
>> > > >>> > Probation as ordered by this Court on April 11,
>> > > >>> > 1997
>> > > >>> > is ordered continued with the following added
>> > > >>> > conditions: 1) Seek and maintain gainful
>> > > >>> > employment;
>> > > >>> > 2) Defendant to seek mental health counseling; 3)
>> > > >>> > Execute wage withholding agreement.
>> > > >>> >
>> > > >>> > JUDGE JAMES D. JENSEN
>> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
>> > > >>> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $
>> > > >>> > THRU9/23/03
>> > > >>> > SENTENCE C-184-502
>> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
>> > > >>> > 3/15/2002 1 Title : COMMUNITY CONTROL TERMINATED
>> > > >>> > terminated unsuccesfully
>> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
>> > > >

>> > > > And here we have some feedback from someone he did business with on
>> > > > Ebay:
>> > > >
>> > > > Won auction- agreed to terms-left neg about fees. no honor/r
>> > > > integrity.dishonest
>> > > > bpc_electronics (11144) May-03-01 03:42 1234227431
>> > > > Follow-up by bpc_electronics: Underage middle-schooler. Watch
>> > > > for
>> > > > viruses in his emails.Signs U up 4 spam list
>> > > > Reply by superskyhooks: Email me for flist of Ebayers this guy
>> > > > has ripped off...
>> > > >
>> > > >
>> > > >
>> > > > Doesn't sound like our Dogie, does it? :-)
>> > > >
>> > > >
>> >
>> > How did we KNOW that the keyclowns could not resist a chance to fall
>> > over themselves with attempts to defame, insult and threaten? How did
>> > we KNOW?
>> >
>> > Look at their history...they know they are wrong to be keyclowns, so
>> > they cannot actually defend their position.
>> >
>> Oh that's priceless! A convicted felon child abuser preaching about
>> what's right or wrong.
>>
>> PKB much, felon boi?
>
> Cries? Heheheh...looks like you are the keyclown whining in your
> frustration. How does it feel to know that you are powerless to stop
> AKC dissent. There is nothing you can do, sidewalk sissy...nada...and
> we just keep proving it. Happy Thursday, maybe we SHOULD put you and
> sidewalk sissy Chukkee on pay per view....putya in a ring and have the
> judges decide the most limpwristed of the 2 of ya. HARDEEHARRHARRHARR.
> Man, the AKC could clean up by selling feminine hygene and baby toy
> ads on the show, not to mention auctioning off the winner's pink
> tights on ebay...woo hoo...I KNOW keyclowns would bid that sucker up!

Hey Doug, just a question...how long you figure until you do a complete meltdown again and start posting porn related garbage? I know in the past, you don't have much tolerance for being made a fool of, but I was just wondering if the COURT ORDERED helped you any.

Take care guy, and I'm glad you can't afford a trip to Texas, otherwise I'd have to watch my back.

BWHAAAAAAAAAAHAAAAAAAAHAAAAAAAAA!!!!!!!!!!!!!!!!!!!!!!!!!!

3605. Re: N8WWM the felon cries when confonted-NOW FIXED

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 20:20:26 UTC
From: "I am not george, itoldyouiamnotiamnotgeorge are morons!" <KennelMaster@not-here.com>
Message-ID: <eeG4d.16567$Qb.460@fe2.texas.rr.com>
Source record: 89176
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

"I am not george, itoldyouiamnotiamnotgeorge are morons!"
<KennelMaster@not-here.com> wrote in message
news:mbG4d.31189$1d6.22630@fe1.texas.rr.com...
>
> "Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in message
> news:586e7bbf.0409231131.3217dfff@posting.google.com...
>> Steveo <moparholic@hotmail-nospam.com> wrote in message
>> news:<20040923075006.376$Wq_-_@newsreader.com>...
>>> N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
>>> > "KC8QJP" <KC8QJP@crisco.net> wrote in message
>>> > news:<2re39cF18vkq2U1@uni-berlin.de>...
>>> > > im crisco kathy and i approve this message
>>> > > "I ain't George either" <KennelMaster@not-here.com> wrote in message
>>> > > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
>>> > > >
>>> > > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
>>> > > > news:20040920090055.723$YO@newsreader.com...
>>> > > >> Article 3 of 1989 in rec.radio.amateur.antenna
>>> > > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
>>> > > >>
>>> > > >> Steveo <moparholic@hotmail-nospam.com>
>>> > > >> Organization: passionate jerk
>>> > > >> Today 8:40 AM
>>> > > >>
>>> > > >> References: [google.com]
>>> > > >>
>>> > > >> Yep, that's the same crook. Doug Adair (N8WWM)
>>> > > >>
>>> > > >> btw..your url link for his antenna scam didn't work. Here it is:
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>>> > > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
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>>> > > >> zerobeatradio@yahoo.com (zerobeat) wrote:
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>>> > > >>> N8WWM Doug Adair.
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>>> > > >>> What a loser!
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>>> > > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
>>> > > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
>>> > > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in
>>> > > >>> > > message
>>> > > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
>>> > > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post on
>>> > > >>> > > > keyclownism
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>>> > > >>> > > You are welcome. See, people?
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>>> > > > bpc_electronics (11144) May-03-01 03:42 1234227431
>>> > > > Follow-up by bpc_electronics: Underage middle-schooler. Watch
>>> > > > for
>>> > > > viruses in his emails.Signs U up 4 spam list
>>> > > > Reply by superskyhooks: Email me for flist of Ebayers this guy
>>> > > > has ripped off...
>>> > > >
>>> > > >
>>> > > >
>>> > > > Doesn't sound like our Dogie, does it? :-)
>>> > > >
>>> > > >
>>> >
>>> > How did we KNOW that the keyclowns could not resist a chance to fall
>>> > over themselves with attempts to defame, insult and threaten? How did
>>> > we KNOW?
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>>>
>>> PKB much, felon boi?
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>> Cries? Heheheh...looks like you are the keyclown whining in your
>> frustration. How does it feel to know that you are powerless to stop
>> AKC dissent. There is nothing you can do, sidewalk sissy...nada...and
>> we just keep proving it. Happy Thursday, maybe we SHOULD put you and
>> sidewalk sissy Chukkee on pay per view....putya in a ring and have the
>> judges decide the most limpwristed of the 2 of ya. HARDEEHARRHARRHARR.
>> Man, the AKC could clean up by selling feminine hygene and baby toy
>> ads on the show, not to mention auctioning off the winner's pink
>> tights on ebay...woo hoo...I KNOW keyclowns would bid that sucker up!
>
> Hey Doug, just a question...how long you figure until you do a complete
> meltdown again and start posting porn related garbage? I know in the past,
> you don't have much tolerance for being made a fool of, but I was just

> wondering if the COURT ORDERED SHRINK helped you any.
>
> Take care guy, and I'm glad you can't afford a trip to Texas, otherwise
> I'd have to watch my back.
>
> BWHAAAAAAAAAAHAAAAAAAAHAAAAAAAAA!!!!!!!!!!!!!!!!!!!!!!!!!!
>
>

3606. Re: N8WWM the felon cries when confonted-NOW FIXED

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 20:30:47 UTC
From: KC8QJP <KC8QJP@crisco.net>
Message-ID: <2rgq6bF1adjqgU1@uni-berlin.de>
Source record: 89177
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

```
"I am not george, itoldyouiamnotiamnotgeorge are morons!"
<KennelMaster@not-here.com> wrote in message
news:eeG4d.16567$Qb.460@fe2.texas.rr.com...
>
> "I am not george, itoldyouiamnotiamnotgeorge are morons!"
> <KennelMaster@not-here.com> wrote in message
> news:mbG4d.31189$1d6.22630@fe1.texas.rr.com...
>>
>> "Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in message
>> news:586e7bbf.0409231131.3217dfff@posting.google.com...
>>> Steveo <moparholic@hotmail-nospam.com> wrote in message
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>>>> > > "I ain't George either" <KennelMaster@not-here.com> wrote in
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>>>
>>> Cries? Heheheh...looks like you are the keyclown whining in your
>>> frustration. How does it feel to know that you are powerless to stop
>>> AKC dissent. There is nothing you can do, sidewalk sissy...nada...and
>>> we just keep proving it. Happy Thursday, maybe we SHOULD put you and

>>> sidewalk sissy Chukkee on pay per view....putya in a ring and have the
>>> judges decide the most limpwristed of the 2 of ya. HARDEEHARRHARRHARR.
>>> Man, the AKC could clean up by selling feminine hygene and baby toy
>>> ads on the show, not to mention auctioning off the winner's pink
>>> tights on ebay...woo hoo...I KNOW keyclowns would bid that sucker up!
>>
>> Hey Doug, just a question...how long you figure until you do a complete
>> meltdown again and start posting porn related garbage? I know in the
>> past, you don't have much tolerance for being made a fool of, but I was
>> just wondering if the COURT ORDERED SHRINK helped you any.
>>
>> Take care guy, and I'm glad you can't afford a trip to Texas, otherwise
>> I'd have to watch my back.
>>
>> BWHAAAAAAAAAAHAAAAAAAAHAAAAAAAAA!!!!!!!!!!!!!!!!!!!!!!!!!!
>>
>>
>
my doug has been seeking help for a very long
time.....

From: Douglas (N8WWM@arrl.net)
Subject: Anyone know a referral site for Doctors specializing in dementia?
This is the only article in this thread
View: Original Format
Newsgroups: alt.dementia
Date: 2001-02-20 14:28:08 PST

I need a referral source for doctors specializing in dementia around the
Toledo area.

3607. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 20:53:24 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <8JG4d.3993$%t3.731@lakeread01>
Source record: 89178

"Richard Clark" <kb7qhc@comcast.net> wrote

> I am currently listening to a Lewis Lapham talk put on by our local
> "Town Hall." > 73's
> Richard Clark, KB7QHC

Hi Richard,

Who cares what town hall meetings you listen to? Unsubstantiated crap or the word of God, on a list where it belongs, or in personal e-mails, you'll find a sword's edge you have to reckon with, but you waste everyone's time in rec.radio.xx telling us about it. You have so many valuable opinions and expertise in several areas, but you're a common flamer when it comes to this newsgroup lately. Nothing I read in hundreds of your posts before had such diversions. Will the real radioman please come back?

Best regards,

Jack

3608. Re: Dumb question?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 21:04:21 UTC
From: Butch <lynyrd@cableone.net>
Message-ID: <10l6eimt8dv0j9f@corp.supernews.com>
Source record: 89179

It does not need to be cut, just wrap it around itself on the insulator
side.

Butch KF5DE

Jim Leder wrote:
> I was having a discussion with another ham about dipoles and dipole
> lengths, and a rather silly question came up that neither one of us was sure
> of the answer. If a dipole is using INSULATED wire, can the electrical
> length be altered by just wrapping the ends more or less around the antenna
> wire when attaching the end insulator? Or does the INSULATED wire need to be
> cut? He thinks it does shorten the dipole, I say it doesn't. Hope he is
> right, it makes 'pruning' dipoles a lot easier.
>
> Thanks
>

3609. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 21:37:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qqq3l0difa6nnj2so1ur1rskoa6v2b9l6k@4ax.com>
Source record: 89180

On Thu, 23 Sep 2004 16:53:24 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>Nothing I read in hundreds of your posts before had such
>diversions.

Hi Jack,

My posts number in the thousands (nearly 10 of them in 10 years).

As for choices in what to post, I responded to BOTH the issue of an antenna AND the comment of Iraq. I would note you and Jim both have chosen NOT to comment on antennas and ONLY about the political scene.

If your desire was to reduce chatter, how is it that the two of you perpetuate it? I am not particularly cowed by such flaming, nor am I impressed by supposed nobility in newsgroup purity.

I respond to issues that demand analysis. I put up examples and note their correlation. When I get flak that constitutes nothing more than "t'ain't so" I am satisfied the point remains unchallenged, much less untoppled.

I have offered authorities on the subject from BOTH sides of the aisle. (I haven't even yet mentioned what Cornel West had to say.) I perceive nothing but denial from your comments or the grief of illusions shattered. I've probably heard more Republicans say ditch Bush (Bill Ruckelshaus and Russell Train two weeks ago) than Democrats. I've probably registered more Republicans who want to kick Bush out than Democrats who want to elect Kerry.

One speaker offered he could respect Barry Goldwater who found the neo-cons a bunch of effete hypocrites (they all come from the left-wing if you weren't aware). The speaker offered Barry was a lone wolf when he went against the establishment - now the Right Whiners are a herd of sheep.

73's
Richard Clark, KB7QHC

3610. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 21:44:17 UTC
From: Dave <noone@nowhere.com>
Message-ID: <2qCdnR4h-eog3s7cRVn-qg@crocker.com>
Source record: 89181

use whatever you can to hold it up. throw a rope over a tree branch, run it to the peak of your house, whatever you have tall enough... don't have anything tall enough? stand up as much pvc as you can keep upright (25' probably won't stand up, but 10-12' might) and spiral the wire up the pipe.

trim the vertical wire for swr... though trimming the horizontal ones to the same length may also help, especially if they are elevated above ground. if they are sitting on the ground then trimming them will probably only have a small effect.

"G. Doughty" <ki4bbl@cox.net> wrote in message
news:AWF4d.101$TY2.39@lakeread04...
> Dave,
> Thanks so much. One question, do I use a 25' section of pvc to keep it
> upright? Also, should I trim the vertical or the horizontals for swr?
>
> Thanks
> Greg
>
>
> "Dave" <noone@nowhere.com> wrote in message
> news:VIidnY9WWKpcus7cRVn-gg@crocker.com...
> > go to rat shack and buy a couple 25' rolls of hookup wire, put one
> vertical
> > and the others horizontal. hook the vertical one to the center of the
> coax
> > and the horizontal ones to the shield.... voila, instant vertical...
trim
> to
> > make rig happier as needed.
> >
> > "G. Doughty" <ki4bbl@cox.net> wrote in message
> > news:I0F4d.98$TY2.39@lakeread04...
> > > Is there such an animal? I am going to use this rig totally portable
> > > (beach, backyard, woods, open field) and would like to make or
purchase
> a
> > > tuned vertical for thirty. I will be using it with an oak hills
> portable
> > > cw rig. What do you think?
> > >
> > >
> >
> >
>

>

3611. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 22:01:24 UTC
From: k3bu@aol.comNoUsama
Message-ID: <20040923180124.24934.00001495@mb-m28.aol.com>
Source record: 89182

>
>Thanks for the responses. The suggestions were constructive, and they
>confirmed my observation that some people will do just about anything,
>including newsgroup posting, to avoid looking in the manual.
>
>Roy Lewallen, W7EL
>

It is more like what is accepted convention in organizing the programs and menus. Menus can be intuitive and as used elsewhere, or in the form of mystery chase. Normally, programs allow to print the contents of the window just by going to FILE and PRINT and active window is printed. No need to aks questions on the NG :-) You know how it is with manuals - they are for dummies, we are smart. :-)

Yuri, K3BU.us

3612. Re: N8WWM the felon cries when confonted-NOW FIXED

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 22:48:18 UTC
From: I Care <icare@whocares.com>
Message-ID: <MPG.1bbcf28ca9248bf9896d5@netnews.comcast.net>
Source record: 89183
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

In article <2rgq6bF1adjqgU1@uni-berlin.de>, KC8QJP@crisco.net says...
>
> "I am not george, itoldyouiamnotiamnotgeorge are morons!"
> <KennelMaster@not-here.com> wrote in message
> news:eeG4d.16567$Qb.460@fe2.texas.rr.com...
> >
> > "I am not george, itoldyouiamnotiamnotgeorge are morons!"
> > <KennelMaster@not-here.com> wrote in message
> > news:mbG4d.31189$1d6.22630@fe1.texas.rr.com...
> >>
> >> "Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in message
> >> news:586e7bbf.0409231131.3217dfff@posting.google.com...
> >>> Steveo <moparholic@hotmail-nospam.com> wrote in message
> >>> news:<20040923075006.376$Wq_-_@newsreader.com>...
> >>>> N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> >>>> > "KC8QJP" <KC8QJP@crisco.net> wrote in message
> >>>> > news:<2re39cF18vkq2U1@uni-berlin.de>...
> >>>> > > im crisco kathy and i approve this message
> >>>> > > "I ain't George either" <KennelMaster@not-here.com> wrote in
> >>>> > > message
> >>>> > > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
> >>>> > > >
> >>>> > > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
> >>>> > > > news:20040920090055.723$YO@newsreader.com...
> >>>> > > >> Article 3 of 1989 in rec.radio.amateur.antenna
> >>>> > > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
> >>>> > > >>
> >>>> > > >> Steveo <moparholic@hotmail-nospam.com>
> >>>> > > >> Organization: passionate jerk
> >>>> > > >> Today 8:40 AM
> >>>> > > >>
> >>>> > > >> References: [google.com]
> >>>> > > >>
> >>>> > > >> Yep, that's the same crook. Doug Adair (N8WWM)
> >>>> > > >>
> >>>> > > >> btw..your url link for his antenna scam didn't work. Here it is:
> >>>> > > >>
> >>>> > > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
> >>>> > > >>
> >>>> > > >> zerobeatradio@yahoo.com (zerobeat) wrote:
> >>>> > > >>> WOW! Thanks for the heads-up! That's the same felonious loser
> >>>> > > >>> that
> >>>> > > >>> hawks antenna's under the guise of "superskyhooks".

> >>>> > > >>>
> >>>> > > >>> http://tinyurl.com/3nxlt
> >>>> > > >>>
> >>>> > > >>> N8WWM Doug Adair.
> >>>> > > >>>
> >>>> > > >>> What a loser!
> >>>> > > >>>
> >>>> > > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
> >>>> > > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns) wrote:
> >>>> > > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in
> >>>> > > >>> > > message
> >>>> > > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
> >>>> > > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post on
> >>>> > > >>> > > > keyclownism
> >>>> > > >>> > > > now I understand what motivates these guys and why they
> >>>> > > >>> > > > act
> >>>> > > >>> > > > the way
> >>>> > > >>> > > > they do. It is always fun to watch them kind of like
> >>>> > > >>> > > > animals
> >>>> > > >>> > > > in the
> >>>> > > >>> > > > zoo or hamsters in a cage. I have a pet keyclown his name
> >>>> > > >>> > > > is
> >>>> > > >>> > > > Twisty
> >>>> > > >>> > > > and he wont obey commands, wont make sense, stirs up the
> >>>> > > >>> > > > other keyclowns, etc. Is there some special book I Should
> >>>> > > >>> > > > read to understand Twisty?
> >>>> > > >>> > > >
> >>>> > > >>> > > > Thanks again.
> >>>> > > >>> > >
> >>>> > > >>> > > You are welcome. See, people?
> >>>> > > >>> >
> >>>> > > >>> > That's priceless! You're talking to yourself and handing out
> >>>> > > >>> > Psychiatric advice. Did your court ordered shrink teach you
> >>>> > > >>> > that
> >>>> > > >>> > trick?
> >>>> > > >>>
> >>>> > > >>> COUNT PARTY DESCRIPTION ABBREV.
> >>>> > > >>> 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF
> >>>> > > >>> DEPENDENTS
> >>>> > > >>> F4
> >>>> > > >>>
> >>>> > > >>> Defendant to seek mental health counseling
> >>>> > > >>>
> >>>> > > >>> Pursuant to the request of probation a capias is
> >>>> > > >>> ordered issued. Bond is set at $5,000.00 no 10%.
> >>>> > > >>>
> >>>> > > >>> Probation as ordered by this Court on April 11,
> >>>> > > >>> 1997
> >>>> > > >>> is ordered continued with the following added
> >>>> > > >>> conditions: 1) Seek and maintain gainful

> >>>> > > >>> > employment;
> >>>> > > >>> > 2) Defendant to seek mental health counseling; 3)
> >>>> > > >>> > Execute wage withholding agreement.
> >>>> > > >>> >
> >>>> > > >>> > JUDGE JAMES D. JENSEN
> >>>> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
> >>>> > > >>> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $
> >>>> > > >>> > THRU9/23/03
Texas, where men are men and the Sheep are nervous :-}

3613. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 22:50:49 UTC
From: richardharrison@webtv.net
Message-ID: <20536-41535349-333@storefull-3257.bay.webtv.net>
Source record: 89184

Roy, W7EL wrote:
"And a 1" square solar cell is about 50,000 wavelengths on a side."

Yes. The wavelength of light is so short, about 1/50,000 inch according to Roy, that it is measured in Angstroms. The Angstrom is about 10 to the minus 10th power meter.

My question is why anyone would want to produce micro, micro antenna arrays when the LASER produces a narrow, uniform, high-intensity beam of light of one very pure color (frequency) that can be directed in a very thin concentrated beam over short and very long distances. Maybe there isn`t such an efficient receiving device?

LASER (light amplification by stimulated emission of radiation) light can be so intense that it can vaporize the hardest and most heat-resistant materials. Can`t a receiving LASER be locked in-step with external synchronization to provide necessary gain and selectivity?

I wrote: "Electricity does not travel through a void. Fields travel through a void."

Electrons do travel through voids quite readily. Note the display on a CRT. They take advantage of the emptyness not to colide with matter so they can continue their flight. There are also countless electrons wandering in space between the heavenly bodies, but not so many as to provide a conductor.

What I meant to imply was that an EM wave does not consist of actual volts and amps until a conductor intervenes to have the fields generate the volts and amps on it.

Best regards, Richard Harrison, KB5WZI

3614. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 23:14:08 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10l6m5b7etrok7d@corp.supernews.com>
Source record: 89185

Even more trivia:
My work at the Big Ear under W8JK years before N8EE's work involved the first digital recording of radio astronomy signals including time information. (Slave labor, AKA graduate students, were used previously to digitize the strip charts used.) The recording medium was punched paper tape and the (very off-line) processor was an IBM 1620 (or something like it - it was a true decimal machine intended originally for accounting - some arithmetic operations involved table look up!). It took several orders of magnitude improvement in computational power and in ancillary equipment to arrive at what Jim was able to do. I delight in that progress.
Pertinent to this group, is the admonition that one still needs to understand the analog part of any such information gathering system even while digital power increases. At least within my remaining lifetime, the antenna(s), transmission line(s), and "first stage" will remain the province of analog engineering. This group will have plenty to discuss before it is supplanted with an A to D converter!
73 Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"JLB" <IHateSpam@nospam.net> wrote in message
news:C1D4d.8$qL3.7@fe39.usenetserver.com...
> Some more "Trivia" for you and other interested parties....
>
> The actual idea was conceived by Dr. Robert S. Dixon W8ERD, who at the
time
> was Assitant Director of the Ohio State RadioObservatory (Big Ear) and
> Director of the Academic Computer Center. I was working there as a
Graduate
> Research Assistant (official title) and Chief Engineer (unofficial title)
> and had not yet decided on a thesis topic. He was wondering if it would
be
> possible to digitize the signals at each antenna element in an array and
> then, through digital signal processing, form all possible beams in all
> directions simultaneously. And the rest is history, as the saying goes.
>
<snip>
> --
> Jim
> N8EE

3615. Re: Radio astronomers build huge antenna farm 350km across in Nethe...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 23:21:23 UTC
From: richardharrison@webtv.net
Message-ID: <12295-41535A73-291@storefull-3256.bay.webtv.net>
Source record: 89187

Chip wrote:
"I still have my PDP 10 programming manual."

As I recall from circa 1970, the Digital Equipment tiny-biny was the programmable data processor, PDP 8. I remember Schlumberger having in its Houston Headquarters a PDP 10, The PDP 10 was a rather large number cruncher which could be used for scientific purposes as well as for business applications. I think they ran both FORTRAN and COBOL.

My employer tried Raytheon 704`s for minicomputers, then switched to Digital Equipment VAX machines. They worked well.

Best regards, Richard Harrison, KB5WZI

3616. [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-23 23:27:38 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <KZI4d.4027$%t3.3680@lakeread01>
Source record: 89186

"Richard Clark" <kb7qhc@comcast.net> wrote

> I respond to issues that demand analysis. I put up examples and note
> their correlation. When I get flak that constitutes nothing more than
> "t'ain't so" I am satisfied the point remains unchallenged, much less
> untoppled.
>
> I have offered authorities on the subject from BOTH sides of the
> aisle. (I haven't even yet mentioned what Cornel West had to say.) I
> perceive nothing but denial from your comments or the grief of
> illusions shattered. I've probably heard more Republicans say ditch
> Bush (Bill Ruckelshaus and Russell Train two weeks ago) than
> Democrats. I've probably registered more Republicans who want to kick
> Bush out than Democrats who want to elect Kerry.

Hi Richard, you are starting the flames of issues not asked here, and doing a boring job of it at that. It is impolite to make unsolicited replies to an individual's email, so we punish the group for it. Proud to be part of that, I'm not. You haven't read anything that most of us here haven't already or couldn't if we wanted to. Whatever your education in political science is (it was an 18 credit minor in college for me), you seem unaware that there isn't a debatable difference between the Republican and Democratic Parties today. Rhetoric aside, and that means ignoring the speakers you love to reference as well as all pre-election babble, I'm going to offer that if you want to debate something here, shift a thread with [OT} in the subject, and then pick a topic you have real interest in, not some speaker/flavor of the day that blew your skirt up on the radio.

>
> One speaker offered he could respect Barry Goldwater who found the
> neo-cons a bunch of effete hypocrites (they all come from the
> left-wing if you weren't aware). The speaker offered Barry was a lone
> wolf when he went against the establishment - now the Right Whiners
> are a herd of sheep.

This is exactly what I'm talking about. No connection to anything, stereotyping without factual reference or relevance, and closing with an opinion you obviously like, but which differs with millions of people who are well educated and very committed to understanding and explaining conservative principles. Assuming you really desire to make a contribution to solving America's problems, then knowing America's strengths, and how we got here, is of course a prerequisite. I consider the choice of experts which you consider quotable to indicate you are lacking in those fundamentals, offering a weak attempt to impress others with your street knowledge of the hacks-of-the day.

>
> 73's
> Richard Clark, KB7QHC

73,
Jack Painter
Virginia Beach

3617. WTB Crank up mast

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 00:27:45 UTC
From: Shadow 998 <hrd998cc@nospam.yahoo.com>
Message-ID: <5SJ4d.692$JG2.558@newssvr14.news.prodigy.com>
Source record: 89188

Wanted, US Tower MA40 or MA550 or equal crank up mast. I need a minimum of
40 feet max 50 or so. No towers, please. Will pick up a reasonable
distance
from Sacramento, CA

reply to mycallsign(at)sbcglobal dot net

Thanks.
Russ KG6TDX

3618. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 00:44:45 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <e5q6l0dm1ppj8gts3md61gngh6e4cd0t6k@4ax.com>
Source record: 89189

On Thu, 23 Sep 2004 14:57:41 -0400, "G. Doughty" <ki4bbl@cox.net>
wrote:

>Is there such an animal? I am going to use this rig totally portable
>(beach, backyard, woods, open field) and would like to make or purchase a
>tuned vertical for thirty. I will be using it with an oak hills portable
>cw rig. What do you think?
>

A vertical wire about 23' to 24' high will give you a 1/4 wave
vertical antenna for 30 meters. Add several radial wires of the same
length to spead on the ground, and you should be good to go. Feed with
coax.

The vertical wire might have a rope and a small weight on the free
end, to hang the wire from any handy limb.

There's a handy vertical antenna calculator at
http://www.csgnetwork.com/antennagpcalc.html

Bob
k5qwg

3619. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 00:45:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b664l09n20bfct8ukbe4kpo1u152qga7fo@4ax.com>
Source record: 89190

On Thu, 23 Sep 2004 17:50:49 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>Roy, W7EL wrote:
>"And a 1" square solar cell is about 50,000 wavelengths on a side."

Hi Richard,

That wasn't very apropos of anything without some correlative. One such is that as a consequence of that size (in wavelength count), the cell exhibits a Lambertian shaped distribution for radiation response characteristic.

>My question is why anyone would want to produce micro, micro antenna
>arrays when the LASER produces a narrow, uniform, high-intensity beam
>of light of one very pure color (frequency) that can be directed in a
>very thin concentrated beam over short and very long distances. Maybe
>there isn`t such an efficient receiving device?

Someone may choose to replace the LASER by such an antenna grid, but there is a world of other choices for their effort that LASER does not enter into.

One such application, that I have offered here in the past, is a conjugate mirror. Researchers have designed one in the RF mm wavelengths. Nanotechnology has the promise of shrinking that dimension to the visible light wavelengths - using DNA base pairs for structure if they chose. ;-)

In a sense the conjugate mirror is the reverse analogue of the LASER and would work quite well with LASER emissions. In fact it could enable a new class of LASER construction.

73's
Richard Clark, KB7QHC

3620. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 00:57:42 UTC
From: fractenna@aol.com
Message-ID: <20040923205742.25417.00000675@mb-m22.aol.com>
Source record: 89191

>
>while digital power increases. At least within my remaining lifetime, the
>antenna(s), transmission line(s), and "first stage" will remain the province
>of analog engineering. This group will have plenty to discuss before it is
>supplanted with an A to D converter!
> 73 Mac N8TT

Mac,

These days, good analog RF folks are worth their weight in platinum. I like to maintain a library of older RF books just to keep the younger guys on their toes:-)

73,
Chip N1IR

73,
Chip N1IR

3621. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 00:59:52 UTC
From: fractenna@aol.com
Message-ID: <20040923205952.25417.00000676@mb-m22.aol.com>
Source record: 89192

Hi Richard,

A laser is very inefficient, power-wise.

Nano antennas may offer a cheap option for high efficiency solar conversion.
Yet to be demonstrated.

73,
Chip N1IR

3622. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 01:40:41 UTC
From: Dogs - nothing but dogs !! <A20897uhf784@Hotmail.com>
Message-ID: <41537b18@post.usenet.com>
Source record: 89193

**** Post for FREE via your newsreader at post.usenet.com ****

"Richard Clark"
> Of course a Lot Of Crazy [Dogs]
> will then bluster in outrage that
> IR is not light.

No I would not - you're totally wrong.

BUT...

I would happily remind you or anyone else to pay attention to the word VISIBLE, as in visible light, when you, or y'all, clearly neglected to pay sufficient attention (DARPA and all that IR sub-thread) to the exact contents of the CNN article and my previous postings (all of which were perfectly clear).

See the diff ?

Furthermore, you're (intentionally?) ignoring my previous Position Statement: "I'm as in favour of the fundamental sameness of light to radio waves as anyone." Given IR's position in the spectrum, you can easily derive how I feel about its nature.

Your comment (top) was unfair - almost mean.

<sniff> <-- ;-)

-=-=-=

3623. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 01:54:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o774l01a2n5db0sr5id2l2uf00hlr3sd2r@4ax.com>
Source record: 89194

On Thu, 23 Sep 2004 19:27:38 -0400, "Jack Painter" <223bthp@cox.net>
wrote:
>doing a boring job of it at that

Hi Jack,

This is a curious complaint as I review your past correspondence. For more than a week it constitutes basically non-antenna discussion with a vengeance: The date format on should it be 9/11 or 11/9; firearms and gun control for 7 out of 8 postings by you in "half-wave dipole in the forest"; a lob against the school system; and 3 here in this and the original thread.

Lately you seem to be quite bored with antennas. Others can compare my choice of subjects responded to, and how well. To this point, one nameless canuk takes issue and I note your absence in all of those discussions. Should we continue with what Cornel West had to say? :-)

> It is impolite to make unsolicited replies to an
>individual's email, so we punish the group for it.
shows an odd reason to create your own topic. Further, your statement, as intriguing as it is, doesn't make any sense on the face of it.

>This is exactly what I'm talking about. No connection to anything,

And one wonders how you can both complain of it, and simultaneously offer so much of it in the same breath.

73's
Richard Clark, KB7QHC

3624. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:01:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6eb4l09ta701mvb38tta5anbj4f6mnnlv3@4ax.com>
Source record: 89195

On Thu, 23 Sep 2004 22:40:41 -0300, "Dogs - nothing but dogs !!"
<A20897uhf784@Hotmail.com> wrote:

>No I would not - you're totally wrong.
>
>BUT...

Hi Dogs,

Well that about covers it.

73's
Richard Clark, KB7QHC

3625. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:03:48 UTC
From: Dogs - nothing but dogs !! <A20897uhf784@Hotmail.com>
Message-ID: <41538082$1@post.usenet.com>
Source record: 89196

**** Post for FREE via your newsreader at post.usenet.com ****

...insect eyes as prior art...
...ignoring keyword 'visible'...
...I have a $4 calculator...

Sigh...

"Dogs - nothing but dogs!!" on 20 Sept 2004:
> If anyone can provide any 'old' news for actual
> 'EM' antennas for ~visible~ light, please post
> the link...

3 days pass slowly by... ...no reply, nothing.

"Dogs, nothing but dogs !!" on 21 Sept 2004:
> Also, if anyone has any links to prior art 'visible'
> light scale antennas, please post links. IR need
> not apply - could be ten times the size (maybe
> more).

2 days - still nothing but commentary.

"Dogs, nothing but dogs !!" on 22 Sept 2004:
> If anyone has any links to prior art 'visible' light
> scale antennas, then please post links. ...
> As with George Jr, I don't think that even an
> offer of a $50,000 reward would help in the
> search.

Another day passes...and still no one has 'claimed the mythical $50k'
reward.

OK - Time's up.

I claim utter victory.

Thanks for playing.

-=-=-=

3626. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:10:09 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10l70fbm4qk0b6d@corp.supernews.com>
Source record: 89197

Chip:
Amen. An objective of most who teach in the area is to nurture students who are able to discern when it is analog time and when it is digital time. The allure of digital has to be mollified. Occasionally one has a student who's eyes light up when he or she is exposed to the art of analog after seeing the science of same. Many more students are appalled.

It has been one of the pleasures of my life to collaborate with a wonderful colleague (and extra class radio amateur) as a catalyst and teller of stories while he puts down some of the accumulated analog wisdom reinforced by his analysis, insight, and exposition. No doubt some was acquired in this group. Look for his encyclopedic book from CRC to be available within about a month.
73 Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Fractenna" <fractenna@aol.com> wrote in message
news:20040923205742.25417.00000675@mb-m22.aol.com...
> >
> >while digital power increases. At least within my remaining lifetime,
the
> >antenna(s), transmission line(s), and "first stage" will remain the
province
> >of analog engineering. This group will have plenty to discuss before it
is
> >supplanted with an A to D converter!
> > 73 Mac N8TT
>
> Mac,
>
> These days, good analog RF folks are worth their weight in platinum. I
like to
> maintain a library of older RF books just to keep the younger guys on
their
> toes:-)
>
> 73,
> Chip N1IR
>
>
> 73,
> Chip N1IR

3627. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:21:19 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <-vKdnZ8654cCGc7cRVn-tQ@adelphia.com>
Source record: 89198

Jack Painter wrote:

> (it was an 18 credit minor in college for me), you seem unaware that there
> isn't a debatable difference between the Republican and Democratic Parties
> today.

Jack, My opinion of you just went up by quite a bit!

But I would like a *candidate* that a *conservative* could vote for!!!!
Neocons just strike me as Liberals with bad tempers.

People argue Republican vs. Democrat like they do Coke vs. Pepsi. The
closer the products, the more shrill the arguments. And in the end,
despite all the sound and fury, they both taste like carbonated battery
acid.

- Mike KB3EIA -

3628. Re: infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:25:16 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <ue-dndranOoRGM7cRVn-hQ@adelphia.com>
Source record: 89199

Ron wrote:

> hello all,
> is there anybody who can give me detailt information about the
> dimensions of a isotron-antenna for the 160m-band? any links or
> homebrew-descriptions?
> many tzhanks

Ohhhhhh Noooo!! The dreaded Isotron antenna!!!!!! If you are serious, the Isotron is kind of like a dummy load on the end of a radiating feedline. THe signal that is put out is due to the feedline.

If you are joking, Good one!!

- Mike KB3EIA -

3629. Re: N8WWM the felon cries when confonted-NOW FIXED

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:28:57 UTC
From: "I am not george, itoldyouiamnotiamnotgeorge are morons!" <KennelMaster@not-here.com>
Message-ID: <JDL4d.32907$1d6.3472@fe1.texas.rr.com>
Source record: 89200
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

```
"I Care" <icare@whocares.com> wrote in message
news:MPG.1bbcf28ca9248bf9896d5@netnews.comcast.net...
> In article <2rgq6bF1adjqgU1@uni-berlin.de>, KC8QJP@crisco.net says...
>>
>> "I am not george, itoldyouiamnotiamnotgeorge are morons!"
>> <KennelMaster@not-here.com> wrote in message
>> news:eeG4d.16567$Qb.460@fe2.texas.rr.com...
>> >
>> > "I am not george, itoldyouiamnotiamnotgeorge are morons!"
>> > <KennelMaster@not-here.com> wrote in message
>> > news:mbG4d.31189$1d6.22630@fe1.texas.rr.com...
>> >>
>> >> "Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in
>> >> message
>> >> news:586e7bbf.0409231131.3217dfff@posting.google.com...
>> >>> Steveo <moparholic@hotmail-nospam.com> wrote in message
>> >>> news:<20040923075006.376$Wq_-_@newsreader.com>...
>> >>>> N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns)
>> >>>> wrote:
>> >>>> > "KC8QJP" <KC8QJP@crisco.net> wrote in message
>> >>>> > news:<2re39cF18vkq2U1@uni-berlin.de>...
>> >>>> > > im crisco kathy and i approve this message
>> >>>> > > "I ain't George either" <KennelMaster@not-here.com> wrote in
>> >>>> > > message
>> >>>> > > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
>> >>>> > > >
>> >>>> > > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
>> >>>> > > > news:20040920090055.723$YO@newsreader.com...
>> >>>> > > >> Article 3 of 1989 in rec.radio.amateur.antenna
>> >>>> > > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
>> >>>> > > >>
>> >>>> > > >> Steveo <moparholic@hotmail-nospam.com>
>> >>>> > > >> Organization: passionate jerk
>> >>>> > > >> Today 8:40 AM
>> >>>> > > >>
>> >>>> > > >> References: [google.com]
>> >>>> > > >>
>> >>>> > > >> Yep, that's the same crook. Doug Adair (N8WWM)
>> >>>> > > >>
>> >>>> > > >> btw..your url link for his antenna scam didn't work. Here it
>> >>>> > > >> is:
>> >>>> > > >>
>> >>>> > > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
```

>> >>>> > > >>
>> >>>> > > >> zerobeatradio@yahoo.com (zerobeat) wrote:
>> >>>> > > >>> WOW! Thanks for the heads-up! That's the same felonious
>> >>>> > > >>> loser
>> >>>> > > >>> that
>> >>>> > > >>> hawks antenna's under the guise of "superskyhooks".
>> >>>> > > >>>
>> >>>> > > >>> http://tinyurl.com/3nxlt
>> >>>> > > >>>
>> >>>> > > >>> N8WWM Doug Adair.
>> >>>> > > >>>
>> >>>> > > >>> What a loser!
>> >>>> > > >>>
>> >>>> > > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
>> >>>> > > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns)
>> >>>> > > >>> > wrote:
>> >>>> > > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in
>> >>>> > > >>> > > message
>> >>>> > > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
>> >>>> > > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post
>> >>>> > > >>> > > > on
>> >>>> > > >>> > > > keyclownism
>> >>>> > > >>> > > > now I understand what motivates these guys and why
>> >>>> > > >>> > > > they
>> >>>> > > >>> > > > act
>> >>>> > > >>> > > > the way
>> >>>> > > >>> > > > they do. It is always fun to watch them kind of like
>> >>>> > > >>> > > > animals
>> >>>> > > >>> > > > in the
>> >>>> > > >>> > > > zoo or hamsters in a cage. I have a pet keyclown his
>> >>>> > > >>> > > > name
>> >>>> > > >>> > > > is
>> >>>> > > >>> > > > Twisty
>> >>>> > > >>> > > > and he wont obey commands, wont make sense, stirs up
>> >>>> > > >>> > > > the
>> >>>> > > >>> > > > other keyclowns, etc. Is there some special book I
>> >>>> > > >>> > > > Should
>> >>>> > > >>> > > > read to understand Twisty?
>> >>>> > > >>> > > >
>> >>>> > > >>> > > > Thanks again.
>> >>>> > > >>> > >
>> >>>> > > >>> > > You are welcome. See, people?
>> >>>> > > >>> >
>> >>>> > > >>> > That's priceless! You're talking to yourself and handing
>> >>>> > > >>> > out
>> >>>> > > >>> > Psychiatric advice. Did your court ordered shrink teach
>> >>>> > > >>> > you
>> >>>> > > >>> > that
>> >>>> > > >>> > trick?
>> >>>> > > >>>

>> >>>> > > >>> > COUNT PARTY DESCRIPTION ABBREV.
>> >>>> > > >>> > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF
>> >>>> > > >>> > DEPENDENTS
>> >>>> > > >>> > F4
>> >>>> > > >>> >
>> >>>> > > >>> > Defendant to seek mental health counseling
>> >>>> > > >>> >
>> >>>> > > >>> > Pursuant to the request of probation a capias
>> >>>> > > >>> > is
>> >>>> > > >>> > ordered issued. Bond is set at $5,000.00 no
>> >>>> > > >>> > 10%.
>> >>>> > > >>> >
>> >>>> > > >>> > Probation as ordered by this Court on April
>> >>>> > > >>> > 11,
>> >>>> > > >>> > 1997
>> >>>> > > >>> > is ordered continued with the following added
>> >>>> > > >>> > conditions: 1) Seek and maintain gainful
>> >>>> > > >>> > employment;
>> >>>> > > >>> > 2) Defendant to seek mental health counseling;
>> >>>> > > >>> > 3)
>> >>>> > > >>> > Execute wage withholding agreement.
>> >>>> > > >>> >
>> >>>> > > >>> > JUDGE JAMES D. JENSEN
>> >>>> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
>> >>>> > > >>> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $
>> >>>> > > >>> > THRU9/23/03
> Texas, where men are men and the Sheep are nervous :-}

Not all bad. In Ohio, children need to watch their asses.

3630. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:42:13 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <TN-dnRkQI54YFM7cRVn-pw@adelphia.com>
Source record: 89201

Richard Clark wrote:

> On Wed, 22 Sep 2004 14:34:24 -0400, Mike Coslo <mjc5remove@psu.edu>
> wrote:
>
>
>>>Political denial covers a lot of uncomfortable ills.
>>
>> Sad but true.
>
>
> Hi Mike,
>
> I went to a talk last week featuring Philip Gold, a military forces
> planner from the Marine Corps and prolific writer (800 articles) for
> conservative think tanks like the Discovery Institute. His comment
> describing the current administration:
> "SUMOs - Screw Up, Move On"

I recall that when questioned about some past apparent wrongdoings, in most cases the reply was "that's old stuff, we have to move on". So your SUMO sounds about right.

Funny how that *wasn't* the case when they wasted millions of our dollars chasing Whitewater.

Go figure!

- Mike -

3631. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 02:43:31 UTC
From: Mike Coslo <mcoslo@adelphia.net>
Message-ID: <TN-dnRgQI55PFM7cRVn-pw@adelphia.com>
Source record: 89202

H. Adam Stevens, NQ5H wrote:

> "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> news:4151C77D.7060802@psu.edu...
>
>>H. Adam Stevens, NQ5H wrote:
>>
>>
>>>OB Ham topic. I operated W3YRQ's (Jerre I am sorry if I got your call
>
> wrong,
>
>>>it has been 34 years) KWM2 on 20 meter SSB from the Tektite II habitat.
>>>I believe Jerre and I are still the only hams to operate on the ocean
>
> floor.
>
>>
>>Now THAT is cool! What was your setup?
>>
>>- Mike KB3EIA -
>>
>>
>
> KWM2, SB220 in the habitat. Hy Gain 14AVQ on a barge on the surface.
> Worked great!
> SCUBA down to the shack. What fun.
> Life's been somewhat boring since Tektite.

Ground fault detectors I hope. 8^)

- Mike KB3EIA -

3632. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 03:20:34 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <6oM4d.5126$%t3.3377@lakeread01>
Source record: 89203

"Mike Coslo" <mcoslo@adelphia.net> wrote
> Jack Painter wrote:
>
> > (it was an 18 credit minor in college for me), you seem unaware that
there
> > isn't a debatable difference between the Republican and Democratic
Parties
> > today.
>
> Jack, My opinion of you just went up by quite a bit!

Hi Mike, well my first 2 years of undergraduate *were* at Penn State!

> But I would like a *candidate* that a *conservative* could vote for!!!!
Yes, we knew we were in trouble when Christine Todd Whitman said "It's my
party too".

> Neocons just strike me as Liberals with bad tempers.
The Michael Moore syndrome?

> People argue Republican vs. Democrat like they do Coke vs. Pepsi. The
> closer the products, the more shrill the arguments. And in the end,
> despite all the sound and fury, they both taste like carbonated battery
> acid.

Check out Pat Buchanon's book "Death of the West". Then thank folks like
Richard that *want* to be conservative, but because their eyes suddenly open
to hypocrosies in Republican administrations, they blow their bugle of
reteat (from the *rear* of course) leaving us standing up on the front lines
alone. Meanwhile they aid and abet the enemy by leading attacks against us.
In truth, probably the last thing he really wants is to harm his country.
But definitely the least kind of person in the world you would want in a
foxhole with you!

>
> - Mike KB3EIA -
>

Cheers,

Jack Painter
Virginia Beach VA

3633. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 03:38:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vtg4l0pqml2coq2emm2umkc29rtl33i5f9@4ax.com>
Source record: 89204

On Thu, 23 Sep 2004 23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>Then thank folks like Richard that *want* to be conservative

Hi Jack,

Still bored? :-)

73's
Richard Clark, KB7QHC

3634. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 05:02:46 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <WTN4d.84$ek.40@okepread03>
Source record: 89205

"Richard Clark" <kb7qhc@comcast.net> wrote > On Thu, 23 Sep 2004
23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >Then thank folks like Richard that *want* to be conservative
>
> Hi Jack,
>
> Still bored? :-)
>
> 73's
> Richard Clark, KB7QHC

Hi Richard, nope - and I'm actually erecting that center-fed inverted-L this weekend for 2182+ coverage. The advice and help I have received from this group (and especially from you) is appreciated. I picked up the materials today at Radio Works in Portsmouth. They suggested I try a bob-tail curtain if the L doesn't work out. I don't know anyone using that type of antenna on a small scale (we have a rather monstrous one at work, but it is designed as a cloud-warmer, out to 300 miles coverage).

Jack

3635. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 05:30:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vkn4l0tjbn2i3f349i9it0n70g70c4tmnv@4ax.com>
Source record: 89206

On Fri, 24 Sep 2004 01:02:46 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Richard Clark" <kb7qhc@comcast.net> wrote > On Thu, 23 Sep 2004
>23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
>> wrote:
>>
>> >Then thank folks like Richard that *want* to be conservative
>>
>> Hi Jack,
>>
>> Still bored? :-)
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Hi Richard, nope - and I'm actually erecting that center-fed inverted-L this
>weekend for 2182+ coverage. The advice and help I have received from this
>group (and especially from you) is appreciated. I picked up the materials
>today at Radio Works in Portsmouth. They suggested I try a bob-tail curtain
>if the L doesn't work out. I don't know anyone using that type of antenna on
>a small scale (we have a rather monstrous one at work, but it is designed
>as a cloud-warmer, out to 300 miles coverage).
>
>Jack
>

Hi Jack,

Myself, I have just completed building a conventional inverted L.
Just moments from seeing how it plays as I pen this.

73's
Richard Clark, KB7QHC

3636. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 09:09:12 UTC
From: Art <plotsligt@comcast.net>
Message-ID: <F5idneWWn6LVec7cRVn-ug@comcast.com>
Source record: 89207

Just in quest? Seems that all have opinions, just like all have anal
openings. How and when the opinions are shared is one's personal choice.
Many times to the chagrin of the reader, listener, et al fin.<
>Information shared is great, wisdom gained as to the implementation of the
>information is superior to the original material being shared, ability of
>receiver to determine which is to be considered is golden. Cheers
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:vkn4l0tjbn2i3f349i9it0n70g70c4tmnv@4ax.com...
> On Fri, 24 Sep 2004 01:02:46 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
>>
>>"Richard Clark" <kb7qhc@comcast.net> wrote > On Thu, 23 Sep 2004
>>23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
>>> wrote:
>>>
>>> >Then thank folks like Richard that *want* to be conservative
>>>
>>> Hi Jack,
>>>
>>> Still bored? :-)
>>>
>>> 73's
>>> Richard Clark, KB7QHC
>>
>>Hi Richard, nope - and I'm actually erecting that center-fed inverted-L
>>this
>>weekend for 2182+ coverage. The advice and help I have received from this
>>group (and especially from you) is appreciated. I picked up the materials
>>today at Radio Works in Portsmouth. They suggested I try a bob-tail
>>curtain
>>if the L doesn't work out. I don't know anyone using that type of antenna
>>on
>>a small scale (we have a rather monstrous one at work, but it is designed
>>as a cloud-warmer, out to 300 miles coverage).
>>
>>Jack
>>
>
> Hi Jack,
>
> Myself, I have just completed building a conventional inverted L.
> Just moments from seeing how it plays as I pen this.
>

> 73's
> Richard Clark, KB7QHC

3637. Re: infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 09:10:42 UTC
From: Ron <dg1hvw@darc.de>
Message-ID: <4153E492.1020705@darc.de>
Source record: 89208

Mike Coslo schrieb:
>
> If you are joking, Good one!!
>
> - Mike KB3EIA -
hello,
no joke. i am really interrested in, because i have build a very simple
eh-antenna(microvert) and i have done a few dx with this antenna abt. 3m
over the ground. (you can see it at www.ronald-winkler.de) a few weeks
ago i could not believe, that it is work. but it do. so i am looking for
other small simple antennas for the lowbands.
thank you.
ron DG1HVW

3638. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 10:49:59 UTC
From: Brian - KB9BVN <kb9bvn@arrl.net>
Message-ID: <rZS4d.8433$gG4.3228@newsread1.news.pas.earthlink.net>
Source record: 89209

Check out this portable vertical. Looks great for the beach, camping, etc

http://members.aol.com/realhamradio2/W2IK-ANTENNA.html

I have not built one yet, but I am planning on it this weekend.

I use a K1, Norcal 40A, or DSW II on 20m when I hit the outdoors.

This antenna covers 10 - 160 if you follow the intsructions. I'm making
mine for 15-40

"G. Doughty" <ki4bbl@cox.net> wrote in message
news:AWF4d.101$TY2.39@lakeread04...
> Dave,
> Thanks so much. One question, do I use a 25' section of pvc to keep it
> upright? Also, should I trim the vertical or the horizontals for swr?
>
> Thanks
> Greg
>
>
> "Dave" <noone@nowhere.com> wrote in message
> news:VIidnY9WWKpcus7cRVn-gg@crocker.com...
> > go to rat shack and buy a couple 25' rolls of hookup wire, put one
> vertical
> > and the others horizontal. hook the vertical one to the center of the
> coax
> > and the horizontal ones to the shield.... voila, instant vertical...
trim
> to
> > make rig happier as needed.
> >
> > "G. Doughty" <ki4bbl@cox.net> wrote in message
> > news:I0F4d.98$TY2.39@lakeread04...
> > > Is there such an animal? I am going to use this rig totally portable
> > > (beach, backyard, woods, open field) and would like to make or
purchase
> a
> > > tuned vertical for thirty. I will be using it with an oak hills
> portable
> > > cw rig. What do you think?
> > >
> > >
> >
> >
>

>

3639. Re: Volts at the ends of antenna wires.

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 11:02:41 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10l7vniep61agfc@corp.supernews.com>
Source record: 89210

"Mike Coslo" <mcoslo@adelphia.net> wrote in message
news:TN-dnRgQI55PFM7cRVn-pw@adelphia.com...
>
>
> H. Adam Stevens, NQ5H wrote:
>
> > "Mike Coslo" <mjc5remove@psu.edu> wrote in message
> > news:4151C77D.7060802@psu.edu...
> >
> >>H. Adam Stevens, NQ5H wrote:
> >>
> >>
> >>>OB Ham topic. I operated W3YRQ's (Jerre I am sorry if I got your call
> >
> > wrong,
> >
> >>>it has been 34 years) KWM2 on 20 meter SSB from the Tektite II habitat.
> >>>I believe Jerre and I are still the only hams to operate on the ocean
> >
> > floor.
> >
> >>
> >>Now THAT is cool! What was your setup?
> >>
> >>- Mike KB3EIA -
> >>
> >>
> >
> > KWM2, SB220 in the habitat. Hy Gain 14AVQ on a barge on the surface.
> > Worked great!
> > SCUBA down to the shack. What fun.
> > Life's been somewhat boring since Tektite.
>
> Ground fault detectors I hope. 8^)
>
> - Mike KB3EIA -
>
I'm not sure they'd been invented yet.
Power was from a set of diesel generators on the island.
73
H., NQ5H

3640. Random Legth Receiving Only Ant.; Close Into A Loop ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 11:39:17 UTC
From: Robert11 <rgsxrose@comcast.net>
Message-ID: <Jtidncrn_Zm6msncRVn-tQ@comcast.com>
Source record: 89211

Hi,

New at this.

Do sw listening only (no transmitting) up to 30 MHz.
Like to listen at most all freq's.

Have a random-length simple wire strung around the 4 sides of the attic.
Same wire is fed down a floor into radio.

It's open at the end; NOT connected back to beginning of attic run to form a
loop.

I know I can try it and see, but frankly it's getting hard for me
now to crawl around up there.

Would you expect better performance if it was formed into a loop ?
Why ? (what "theory" or eq's would apply ?)

Thanks,
Bob

3641. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 11:49:30 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <7c28l0tn1jgcte7c7fibt5mcpn81tu0p9v@4ax.com>
Source record: 89212

On Thu, 23 Sep 2004 23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>But definitely the least kind of person in the world you would want in a
>foxhole with you!
>
>>
>> - Mike KB3EIA -
>>
>
>Cheers,
>
>Jack Painter
>Virginia Beach VA
>

Eh? What branch of the service were you in?

bob
k5qwg

3642. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 11:54:46 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <bWT4d.167$gm.99@okepread07>
Source record: 89213

Thanks for all the Info folks. One more question. . how many radials I am thinking 4
Thanks
Greg

"Bob Miller" <rmiller47@satx.rr.com> wrote in message news:e5q6l0dm1ppj8gts3md61gngh6e4cd0t6k@4ax.com...
> On Thu, 23 Sep 2004 14:57:41 -0400, "G. Doughty" <ki4bbl@cox.net>
> wrote:
>
> >Is there such an animal? I am going to use this rig totally portable
> >(beach, backyard, woods, open field) and would like to make or purchase a
> >tuned vertical for thirty. I will be using it with an oak hills portable
> >cw rig. What do you think?
> >
>
> A vertical wire about 23' to 24' high will give you a 1/4 wave
> vertical antenna for 30 meters. Add several radial wires of the same
> length to spead on the ground, and you should be good to go. Feed with
> coax.
>
> The vertical wire might have a rope and a small weight on the free
> end, to hang the wire from any handy limb.
>
> There's a handy vertical antenna calculator at
> http://www.csgnetwork.com/antennagpcalc.html
>
> Bob
> k5qwg
>
>

3643. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 11:59:07 UTC
From: Dave <noone@nowhere.com>
Message-ID: <3NWdnX4GBOGRkcncRVn-iA@crocker.com>
Source record: 89214

4 is good, 3 would be adequate, if on the ground 120 would be excellent.

"G. Doughty" <ki4bbl@cox.net> wrote in message
news:bWT4d.167$gm.99@okepread07...
> Thanks for all the Info folks. One more question. . how many radials I am
> thinking 4
> Thanks
> Greg
>
>
> "Bob Miller" <rmiller47@satx.rr.com> wrote in message
> news:e5q6l0dm1ppj8gts3md61gngh6e4cd0t6k@4ax.com...
> > On Thu, 23 Sep 2004 14:57:41 -0400, "G. Doughty" <ki4bbl@cox.net>
> > wrote:
> >
> > >Is there such an animal? I am going to use this rig totally portable
> > >(beach, backyard, woods, open field) and would like to make or purchase
a
> > >tuned vertical for thirty. I will be using it with an oak hills
> portable
> > >cw rig. What do you think?
> > >
> >
> > A vertical wire about 23' to 24' high will give you a 1/4 wave
> > vertical antenna for 30 meters. Add several radial wires of the same
> > length to spead on the ground, and you should be good to go. Feed with
> > coax.
> >
> > The vertical wire might have a rope and a small weight on the free
> > end, to hang the wire from any handy limb.
> >
> > There's a handy vertical antenna calculator at
> > http://www.csgnetwork.com/antennagpcalc.html
> >
> > Bob
> > k5qwg
> >
> >
>
>

3644. Re: Random Legth Receiving Only Ant.; Close Into A Loop ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 12:05:01 UTC
From: Dave <noone@nowhere.com>
Message-ID: <V-KdndhWx87zkMncRVn-og@crocker.com>
Source record: 89215

i would do lots of very detailed calculations, lots of computer modelling, and measure it with every instrument i could find to be sure it has exactly the pattern predicted and the right impedance across the whole hf band so the receiver would work properly. then after months of computing and modeling and measuring i would hook it up and it would work the same as it would work if i had hooked it up without doing any of that. a random length wire, in close proximity to buildings with wiring and other unknown metal stuff can not be adequetely modeled over even a small range of frequencies, let alone 'most all freqs'. so hook it up and try it, if it lets you hear what you want then leave it alone. if it doesn't then try adding another wire out the window or around the floor or hook up your bedsprings.

"Robert11" <rgsxrose@comcast.net> wrote in message
news:Jtidncrn_Zm6msncRVn-tQ@comcast.com...
> Hi,
>
> New at this.
>
> Do sw listening only (no transmitting) up to 30 MHz.
> Like to listen at most all freq's.
>
> Have a random-length simple wire strung around the 4 sides of the attic.
> Same wire is fed down a floor into radio.
>
> It's open at the end; NOT connected back to beginning of attic run to form
a
> loop.
>
> I know I can try it and see, but frankly it's getting hard for me
> now to crawl around up there.
>
> Would you expect better performance if it was formed into a loop ?
> Why ? (what "theory" or eq's would apply ?)
>
> Thanks,
> Bob
>

3645. Re: infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 12:48:37 UTC
From: pa1are <a.harteveld@noio.tudelft.nl>
Message-ID: <cj14m2$90n$1@news.tudelft.nl>
Source record: 89216

Yep, same principle, radiating feedline !
73, Arend

"Ron" <dg1hvw@darc.de> wrote in message news:4153E492.1020705@darc.de...
>
> Mike Coslo schrieb:
>>
>> If you are joking, Good one!!
>>
>> - Mike KB3EIA -
> hello,
> no joke. i am really interrested in, because i have build a very simple
> eh-antenna(microvert) and i have done a few dx with this antenna abt. 3m
> over the ground. (you can see it at www.ronald-winkler.de) a few weeks ago
> i could not believe, that it is work. but it do. so i am looking for other
> small simple antennas for the lowbands.
> thank you.
> ron DG1HVW
>
>

3646. REQ: Question: Looking For Plans For A Mag Mount Gain Ant At 100mhz, tnx

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 14:00:13 UTC
From: WolfmanJack <WolfmanJack@computermail.net>
Message-ID: <NLV4d.6536$6X1.8933079@news4.srv.hcvlny.cv.net>
Source record: 89217

[No readable article body recovered]

3647. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 14:11:22 UTC
From: 'Doc <w5lz@cwis.net>
Message-ID: <eWV4d.12626$NC4.1605@newssvr31.news.prodigy.com>
Source record: 89218

Art,
'How' you think of, or envision a particular antenna is entirely up to you. But, when you want to communicate your thoughts about that antenna to people who do not 'envision' antennas in the same way that you do, you have to use commonly acceted means/terms. If you don't, there will always be misconceptions/errors in understanding what you are trying to say (doesn't matter if the 'what' is correct or not). I think the problem is in the 'translation'.
'Doc

It's still a nickname. I didn't 'pick' it, it was given to me. It doesn't mean I'm a 'doctor' of anything (I'm not!). Sorry if it still bothers you, get over it.

3648. Re: infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 15:02:08 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cj1ctg$ii4$1@sparta.btinternet.com>
Source record: 89071

"Ron" wrote > hello all,
> is there anybody who can give me detailt information about the
> dimensions of a isotron-antenna for the 160m-band? any links or
> homebrew-descriptions?
==========
Ron, my guess is that none of the replies to your question are from people who have ever used or have even seen the antenna.

With plenty of idle time to spare they are just repeating old wives' rumours for a little mischievous amusement.

From its construction I estimate its performance to be marginally worse than a magloop of the same physical size and operating frequency. And magloops don't do too badly, do they?

Reg

3649. Re: 30 meter qrp vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 15:02:33 UTC
From: "G. Doughty" <ki4bbl@cox.net>
Message-ID: <dGW4d.234$gm.16@okepread07>
Source record: 89219

Sounds good. I am going to put it in practice this weekend.

greg

"Dave" <noone@nowhere.com> wrote in message
news:3NWdnX4GBOGRkcncRVn-iA@crocker.com...
> 4 is good, 3 would be adequate, if on the ground 120 would be excellent.
>
> "G. Doughty" <ki4bbl@cox.net> wrote in message
> news:bWT4d.167$gm.99@okepread07...
> > Thanks for all the Info folks. One more question. . how many radials I
am
> > thinking 4
> > Thanks
> > Greg
> >
> >
> > "Bob Miller" <rmiller47@satx.rr.com> wrote in message
> > news:e5q6l0dm1ppj8gts3md61gngh6e4cd0t6k@4ax.com...
> > > On Thu, 23 Sep 2004 14:57:41 -0400, "G. Doughty" <ki4bbl@cox.net>
> > > wrote:
> > >
> > > >Is there such an animal? I am going to use this rig totally portable
> > > >(beach, backyard, woods, open field) and would like to make or
purchase
> a
> > > >tuned vertical for thirty. I will be using it with an oak hills
> > portable
> > > >cw rig. What do you think?
> > > >
> > >
> > > A vertical wire about 23' to 24' high will give you a 1/4 wave
> > > vertical antenna for 30 meters. Add several radial wires of the same
> > > length to spead on the ground, and you should be good to go. Feed with
> > > coax.
> > >
> > > The vertical wire might have a rope and a small weight on the free
> > > end, to hang the wire from any handy limb.
> > >
> > > There's a handy vertical antenna calculator at
> > > http://www.csgnetwork.com/antennagpcalc.html
> > >
> > > Bob
> > > k5qwg
> > >

> > >
> >
> >
>
>

3650. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 15:02:58 UTC
From: "aunwin@insightbb.com"
Message-ID: <BGW4d.107486$D%.39895@attbi_s51>
Source record: 89220

Doc, You may be correct but if people are hanging around with a stone in
hand
eventualy they are going to throw it. But no matter, since the programs use
is not
clear to me it is unlikly that I will use it.
On the subject of "loops" I see them as a parallel circuit enclosing a
sufficient area
for radiation.The inherent capacitance and inductance and/or with added
lumped
portions of the same creating a path for current for radiation...
This is in contrast to a "stub" that is devoid of an enclosed area or a
"trap" that
blocks the flow of currentat a given frequency.
.Nuff said on this subject
Present focus is on following the thread where Richard the shark placed bait
for
another stone throwing contest and caught another netfull of unknowing
fish to hit upon..
Art

"'Doc" <w5lz@cwis.net> wrote in message
news:eWV4d.12626$NC4.1605@newssvr31.news.prodigy.com...
> Art,
> 'How' you think of, or envision a particular antenna is entirely
> up to you. But, when you want to communicate your thoughts about that
> antenna to people who do not 'envision' antennas in the same way that
> you do, you have to use commonly acceted means/terms. If you don't,
> there will always be misconceptions/errors in understanding what you
> are trying to say (doesn't matter if the 'what' is correct or not).
> I think the problem is in the 'translation'.
> 'Doc
>
>
> It's still a nickname. I didn't 'pick' it, it was given to me.
> It doesn't mean I'm a 'doctor' of anything (I'm not!). Sorry if
> it still bothers you, get over it.

3651. Re: Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 15:57:34 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <mtg8l0dmeokjae0fm3972mv1beq6h9mo38@4ax.com>
Source record: 89072

On Thu, 23 Sep 2004 13:48:58 GMT, larry d clark <buddycl@swbell.net>
wrote:

>Roger Halstead wrote:
>> I'm looking for a good antenna analyzer. Resonant frequency,
>> impedance +/- and magnitude. It'd be nice if it would also feed the
>> results to the computer for display/plot. It would be nice to have a
>> plot of the antenna characteristics on screen.
>>
>> I'm somewhat familiar with the MFJ unit, but wonder what else is out
>> there other than the very expensive commercial units.
>>
>> Roger Halstead (K8RI & ARRL life member)
>> (N833R, S# CD-2 Worlds oldest Debonair)
>> www.rogerhalstead.com
>
>quick and dirty mesurements i use mfj 259,
>however i use a HF-VIA when i want to print/save
>plots etc. see them at:
>http://www.aea-wireless.com/products.htm

Thanks to all, I had tried google, but apparently didn't use the
right search criteria as I didn't come up with anything. This is
pretty much what I had in mind.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com
>
>larry
>kd5foy

3652. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 16:26:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ohi8l0h734e95uajjr1l0fksaqsljb753g@4ax.com>
Source record: 89073

On Fri, 24 Sep 2004 15:02:58 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>Present focus is on following the thread where Richard
More trolling

3653. Re: N8WWM the felon cries when confonted-NOW FIXED

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 17:00:35 UTC
From: KC8QJP <KC8QJP@crisco.net>
Message-ID: <2rj28bF1758pqU1@uni-berlin.de>
Source record: 89074
Cross-posted to: rec.radio.cb,rec.radio.amateur.policy,alt.ham-radio.mods,rec.radio.amateur.antenna

```
"I am not george, itoldyouiamnotiamnotgeorge are morons!"
<KennelMaster@not-here.com> wrote in message
news:JDL4d.32907$1d6.3472@fe1.texas.rr.com...
>
> "I Care" <icare@whocares.com> wrote in message
> news:MPG.1bbcf28ca9248bf9896d5@netnews.comcast.net...
>> In article <2rgq6bF1adjqgU1@uni-berlin.de>, KC8QJP@crisco.net says...
>>>
>>> "I am not george, itoldyouiamnotiamnotgeorge are morons!"
>>> <KennelMaster@not-here.com> wrote in message
>>> news:eeG4d.16567$Qb.460@fe2.texas.rr.com...
>>> >
>>> > "I am not george, itoldyouiamnotiamnotgeorge are morons!"
>>> > <KennelMaster@not-here.com> wrote in message
>>> > news:mbG4d.31189$1d6.22630@fe1.texas.rr.com...
>>> >>
>>> >> "Psychiatrist to keyclowns" <keyklonzrnutjobs@yahoo.com> wrote in
>>> >> message
>>> >> news:586e7bbf.0409231131.3217dfff@posting.google.com...
>>> >>> Steveo <moparholic@hotmail-nospam.com> wrote in message
>>> >>> news:<20040923075006.376$Wq_-_@newsreader.com>...
>>> >>>> N8WWM -- keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns)
>>> >>>> wrote:
>>> >>>> > "KC8QJP" <KC8QJP@crisco.net> wrote in message
>>> >>>> > news:<2re39cF18vkq2U1@uni-berlin.de>...
>>> >>>> > > im crisco kathy and i approve this message
>>> >>>> > > "I ain't George either" <KennelMaster@not-here.com> wrote in
>>> >>>> > > message
>>> >>>> > > news:GdC3d.9531$Gn3.1424@fe2.texas.rr.com...
>>> >>>> > > >
>>> >>>> > > > "Steveo" <moparholic@hotmail-nospam.com> wrote in message
>>> >>>> > > > news:20040920090055.723$YO@newsreader.com...
>>> >>>> > > >> Article 3 of 1989 in rec.radio.amateur.antenna
>>> >>>> > > >> Re: Felon N8WWM Doug Adair has a court ordered Psychiatrist
>>> >>>> > > >>
>>> >>>> > > >> Steveo <moparholic@hotmail-nospam.com>
>>> >>>> > > >> Organization: passionate jerk
>>> >>>> > > >> Today 8:40 AM
>>> >>>> > > >>
>>> >>>> > > >> References: [google.com]
>>> >>>> > > >>
>>> >>>> > > >> Yep, that's the same crook. Doug Adair (N8WWM)
>>> >>>> > > >>
```

>>> >>>> > > >> btw..your url link for his antenna scam didn't work. Here it
>>> >>>> > > >> is:
>>> >>>> > > >>
>>> >>>> > > >> http://www.geocities.com/nutsboutantennas/6_meter_wire.html
>>> >>>> > > >>
>>> >>>> > > >> zerobeatradio@yahoo.com (zerobeat) wrote:
>>> >>>> > > >>> WOW! Thanks for the heads-up! That's the same felonious
>>> >>>> > > >>> loser
>>> >>>> > > >>> that
>>> >>>> > > >>> hawks antenna's under the guise of "superskyhooks".
>>> >>>> > > >>>
>>> >>>> > > >>> http://tinyurl.com/3nxlt
>>> >>>> > > >>>
>>> >>>> > > >>> N8WWM Doug Adair.
>>> >>>> > > >>>
>>> >>>> > > >>> What a loser!
>>> >>>> > > >>>
>>> >>>> > > >>> Steveo <moparholic@hotmail-nospam.com> wrote:
>>> >>>> > > >>> > keyklonzrnutjobs@yahoo.com (Psychiatrist to keyclowns)
>>> >>>> > > >>> > wrote:
>>> >>>> > > >>> > > iamnotgeorge2004@yahoo.com (I Am Not George) wrote in
>>> >>>> > > >>> > > message
>>> >>>> > > >>> > > news:c034bd2.0409191810.45fc9bc2@posting.google.com...
>>> >>>> > > >>> > > > Hey, Psychiatrist to keyclowns. thanks for your post
>>> >>>> > > >>> > > > on
>>> >>>> > > >>> > > > keyclownism
>>> >>>> > > >>> > > > now I understand what motivates these guys and why
>>> >>>> > > >>> > > > they
>>> >>>> > > >>> > > > act
>>> >>>> > > >>> > > > the way
>>> >>>> > > >>> > > > they do. It is always fun to watch them kind of like
>>> >>>> > > >>> > > > animals
>>> >>>> > > >>> > > > in the
>>> >>>> > > >>> > > > zoo or hamsters in a cage. I have a pet keyclown his
>>> >>>> > > >>> > > > name
>>> >>>> > > >>> > > > is
>>> >>>> > > >>> > > > Twisty
>>> >>>> > > >>> > > > and he wont obey commands, wont make sense, stirs up
>>> >>>> > > >>> > > > the
>>> >>>> > > >>> > > > other keyclowns, etc. Is there some special book I
>>> >>>> > > >>> > > > Should
>>> >>>> > > >>> > > > read to understand Twisty?
>>> >>>> > > >>> > > >
>>> >>>> > > >>> > > > Thanks again.
>>> >>>> > > >>> > >
>>> >>>> > > >>> > > You are welcome. See, people?
>>> >>>> > > >>> >
>>> >>>> > > >>> > That's priceless! You're talking to yourself and handing
>>> >>>> > > >>> > out
>>> >>>> > > >>> > Psychiatric advice. Did your court ordered shrink teach

>>> >>>> > > >>> > you
>>> >>>> > > >>> > that
>>> >>>> > > >>> > trick?
>>> >>>> > > >>> >
>>> >>>> > > >>> > COUNT PARTY DESCRIPTION ABBREV.
>>> >>>> > > >>> > 1 (D -1)ADAIR DOUGLAS W NONSUPPORT OF
>>> >>>> > > >>> > DEPENDENTS
>>> >>>> > > >>> > F4
>>> >>>> > > >>> >
>>> >>>> > > >>> > Defendant to seek mental health counseling
>>> >>>> > > >>> >
>>> >>>> > > >>> > Pursuant to the request of probation a capias
>>> >>>> > > >>> > is
>>> >>>> > > >>> > ordered issued. Bond is set at $5,000.00 no
>>> >>>> > > >>> > 10%.
>>> >>>> > > >>> >
>>> >>>> > > >>> > Probation as ordered by this Court on April
>>> >>>> > > >>> > 11,
>>> >>>> > > >>> > 1997
>>> >>>> > > >>> > is ordered continued with the following added
>>> >>>> > > >>> > conditions: 1) Seek and maintain gainful
>>> >>>> > > >>> > employment;
>>> >>>> > > >>> > 2) Defendant to seek mental health
>>> >>>> > > >>> > counseling; 3)
>>> >>>> > > >>> > Execute wage withholding agreement.
>>> >>>> > > >>> >
>>> >>>> > > >>> > JUDGE JAMES D. JENSEN
>>> >>>> > > >>> > PARTY : D1 - ADAIR DOUGLAS W
>>> >>>> > > >>> > 12/5/2000 1 Title : EVT:JE FILE/JOUR $
>>> >>>> > > >>> > THRU9/23/03
>> Texas, where men are men and the Sheep are nervous :-}
>
> Not all bad. In Ohio, children need to watch their asses.
>
im crisco kathy and i have a large butt area doncha no.....

3654. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 17:27:18 UTC
From: "aunwin@insightbb.com"
Message-ID: <WNY4d.16643$He1.16453@attbi_s01>
Source record: 89075

Go get them Richard, you do an excellent job of culling the ranks of radio
amateurs
None, as yet, have stood up to your perpetuation of stone throwing or
spitting because of your high acid content.
Nuff said, I have things to do
outside this newsgroup.
Art
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ohi8l0h734e95uajjr1l0fksaqsljb753g@4ax.com...
> On Fri, 24 Sep 2004 15:02:58 GMT, "aunwin@insightbb.com"
> <aunwin@insightbb.com@insightbb.com> wrote:
> >Present focus is on following the thread where Richard
> More trolling

3655. Re: New program "Not a trap"

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 18:42:15 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mfq8l053094s5p5hqepp9216du6h6ngofc@4ax.com>
Source record: 89076

On Fri, 24 Sep 2004 17:27:18 GMT, "aunwin@insightbb.com"
<aunwin@insightbb.com@insightbb.com> wrote:
>I have things to do
>outside this newsgroup.
write when you find work.

3656. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 18:42:54 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <JUZ4d.140$qL3.111@fe39.usenetserver.com>
Source record: 89077

One of the concepts that I have had trouble getting 'younger' engineers to understand is that a digital signal >>>IS<<< analog! Just because you are running at "only 10 MHz" doesn't mean that you can have 4 inch pigtales. The actual signal bandwidth would extend up to 50 MHzor even more, and you have to treat it like a VHF/UHF RF signal or the bits are going to get lost. Digital is Digital only in the purely logical sense (pun very much intended, by the way).

As for digital signal processing is concerned, just because you have digitized the signal doesn't mean that you have eliminated all of the analog problems. I can think of only three ways that DSP is better...1)no cross talk in signal paths, and 2) lossless signal duplication (think of an analog power splitter), and 3) you can do things easily that previously were just a glimmer in an analog engineers eye (such as multiple simultaneous beams from an antenna array?)

--
Jim
N8EE

to email directly, send to my call sign at arrl dot net

3657. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 19:59:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q796l09o7qkht4ait9nr1g49av24jc2hh1@4ax.com>
Source record: 89078

On Fri, 24 Sep 2004 14:42:54 -0400, "JLB" <IHateSpam@nospam.net>
wrote:

>As for digital signal processing is concerned, just because you have
>digitized the signal doesn't mean that you have eliminated all of the analog
>problems.

Hi Guys,

This reminds me of the problems I had teaching the digital types
Shannon's law for BER.

When I designed the black box for the 757/767, all of my digitized
readings (taken from 600 leads) was passed over to a specialized tape
recorder (25 hour capacity).

Problem was that this digital signal was fed into the recording head
without any bias. Many may be unaware of the advances in audio tape
recording BW that came by the addition of bias, and more, that it
reduced the head's tendency to erase its own stored signal. In
essence, with no bias, you were recording data with two strikes
against you. This was not the hallmark design for a data sensitive
product. Worse yet, was this digital mentality had recorder
specifications that allowed for a S+N/N of 2.

What were the comments I heard in response? "This is not HiFi, it's
digital data, on/off."

Within weeks I was drawn into their simulator lab to view a simulated
cockpit of an KLM aircraft that was being used to display flight
recorder data that was rather -um- noisy (much too much for KLM's
engineers to make sense of it). I watched that plane hit the ground
several times as they struggled to recover digital bits lost in analog
noise.

Several (many) years later I was called to consult on the TWA flight
800 data - more noise that lead to hints of missile strikes. The
panel's best spin on the topic was that it was old data printed
through the new data (even though the difference in time would not
correlate to the two data sets overlapping). We reported it as
exploding gas tanks, Tehran reported it was revenge for our shooting
down one of their civil aircraft during the first Gulf War. Like the
first attack on the Twin Towers, government and the media shrugged off
correlations.

73's
Richard Clark, KB7QHC

3658. Tohtsu coaxial relays - anyone using?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 20:35:45 UTC
From: Floyd Sense <fsense***@risp.biz>
Message-ID: <cj21at$25i$1@news.chatlink.com>
Source record: 89079

I picked up a couple of new Tohtsu CX-600M coaxial relays - they are similar to the DowKey relays, with three UHF connectors of the SO-239 design. I had a problem screwing on the PL-259s more than 3-4 turns and in checking the threads I find that the pitch or threads-per-inch of the Tohtsu connectors does not match that of the PL-259/SO-239 UHF connectors. I wonder if anyone else has run into this problem? I was under the impression that the UHF connector was a universal item, but maybe that is not true?

--
73, Floyd - K8AC

3659. Re: Tohtsu coaxial relays - anyone using?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 21:07:48 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <D005d.359948$8_6.16537@attbi_s04>
Source record: 89080

"Floyd Sense" <fsense***@risp.biz> wrote in message
news:cj21at$25i$1@news.chatlink.com...
>I picked up a couple of new Tohtsu CX-600M coaxial relays - they are
>similar
> to the DowKey relays, with three UHF connectors of the SO-239 design. I
> had
> a problem screwing on the PL-259s more than 3-4 turns and in checking the
> threads I find that the pitch or threads-per-inch of the Tohtsu connectors
> does not match that of the PL-259/SO-239 UHF connectors. I wonder if
> anyone
> else has run into this problem? I was under the impression that the UHF
> connector was a universal item, but maybe that is not true?
>
> --
> 73, Floyd - K8AC
>

Tohtsu web page (English language version)
http://www.tohtsu.com/index-e.htm

Here are the specifications for this coaxial relay from the Tohtsu web site
(isn't the Internet great, electronic library in you house).
http://www.tohtsu.com/products/cx-600m.htm

Henry Radio sells these (new)
http://www.henryradio.com/Tohtsu/cx600m.htm

Invented in the 1930's by an Amphenol engineer named E. Clark Quackenbush,
UHF coaxial connectors are general purpose units developed for use in low
frequency systems from 0.6 - 300 MHz. Invented for use in the radio
industry, UHF is an acronym for Ultra High Frequency because at the time 300
MHz was considered high frequency.

Mechanical
Mating 5/8-24 threaded coupling
Cable Affixment Braid solder, set screw, clamp and crimp

3660. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 21:41:39 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10l95418s8tfi31@corp.supernews.com>
Source record: 89081

Oh my goodness! No bias! Wow.
Both Jim's and Richard's observations are the sort of things that need to be
told to budding engineers.
I tell quite a few stories in class. After all, engineers kill people
with their mistakes in wholesale lots. Stories, since well before writing,
have been the way to communicate the important "stuff." The black box story
needs to be told. I effect some of Jim's story with the (apparently) simple
lab job of connecting N CMOS inverters in a ring - and then "playing."
(Fortunately, we have very high bandwidth scopes in each workstation so that
clues to what is going on can be seen. Thanks to a generous grant from a
company formally known as HP, we can see spectrum too.)

Many thanks for your contributions.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:q796l09o7qkht4ait9nr1g49av24jc2hh1@4ax.com...
> On Fri, 24 Sep 2004 14:42:54 -0400, "JLB" <IHateSpam@nospam.net>
> wrote:
>
> >As for digital signal processing is concerned, just because you have
> >digitized the signal doesn't mean that you have eliminated all of the
analog
> >problems.
>
> Hi Guys,
>
> This reminds me of the problems I had teaching the digital types
> Shannon's law for BER.
>
> When I designed the black box for the 757/767, all of my digitized
> readings (taken from 600 leads) was passed over to a specialized tape
> recorder (25 hour capacity).
>
> Problem was that this digital signal was fed into the recording head
> without any bias. Many may be unaware of the advances in audio tape
> recording BW that came by the addition of bias, and more, that it
> reduced the head's tendency to erase its own stored signal. In
> essence, with no bias, you were recording data with two strikes
> against you. This was not the hallmark design for a data sensitive

> product. Worse yet, was this digital mentality had recorder
> specifications that allowed for a S+N/N of 2.
>
> What were the comments I heard in response? "This is not HiFi, it's
> digital data, on/off."
>
> Within weeks I was drawn into their simulator lab to view a simulated
> cockpit of an KLM aircraft that was being used to display flight
> recorder data that was rather -um- noisy (much too much for KLM's
> engineers to make sense of it). I watched that plane hit the ground
> several times as they struggled to recover digital bits lost in analog
> noise.
>
> Several (many) years later I was called to consult on the TWA flight
> 800 data - more noise that lead to hints of missile strikes. The
> panel's best spin on the topic was that it was old data printed
> through the new data (even though the difference in time would not
> correlate to the two data sets overlapping). We reported it as
> exploding gas tanks, Tehran reported it was revenge for our shooting
> down one of their civil aircraft during the first Gulf War. Like the
> first attack on the Twin Towers, government and the media shrugged off
> correlations.
>
> 73's
> Richard Clark, KB7QHC

3661. Re: Tohtsu coaxial relays - anyone using?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 22:09:48 UTC
From: Floyd Sense <fsense***@risp.biz>
Message-ID: <cj26r9$m9k$1@news.chatlink.com>
Source record: 89082

Thanks, but I've already covered that ground. The connectors are not threaded per the specs. I reported the problem to the dealer, and they told me that after checking their stock, they found that about half of the relays had incorrect threads on the connectors.

So, if anyone is in the market for a coaxial relay and are considering Tohtsu, make sure that the seller tries a PL-259 on ALL THREE of the connectors on the relay. Hard to understand how a reputable machine company could make such a mistake, but it happened. The dealer, Nebraska Surplus Sales, stepped up to the problem immediately and is doing the right thing.

73, K8AC

"G.Beat" <now9spamgb@no.comcast.spam.net.invalid> wrote in message news:D005d.359948$8_6.16537@attbi_s04...
> "Floyd Sense" <fsense***@risp.biz> wrote in message
> news:cj21at$25i$1@news.chatlink.com...
> >I picked up a couple of new Tohtsu CX-600M coaxial relays - they are
> >similar
> > to the DowKey relays, with three UHF connectors of the SO-239 design. I
> > had
> > a problem screwing on the PL-259s more than 3-4 turns and in checking
the
> > threads I find that the pitch or threads-per-inch of the Tohtsu
connectors
> > does not match that of the PL-259/SO-239 UHF connectors. I wonder if
> > anyone
> > else has run into this problem? I was under the impression that the UHF
> > connector was a universal item, but maybe that is not true?
> >
> > --
> > 73, Floyd - K8AC
> >
>
> Tohtsu web page (English language version)
> http://www.tohtsu.com/index-e.htm
>
> Here are the specifications for this coaxial relay from the Tohtsu web
site
> (isn't the Internet great, electronic library in you house).
> http://www.tohtsu.com/products/cx-600m.htm
>
> Henry Radio sells these (new)
> http://www.henryradio.com/Tohtsu/cx600m.htm
>

> Invented in the 1930's by an Amphenol engineer named E. Clark Quackenbush,
> UHF coaxial connectors are general purpose units developed for use in low
> frequency systems from 0.6 - 300 MHz. Invented for use in the radio
> industry, UHF is an acronym for Ultra High Frequency because at the time
300
> MHz was considered high frequency.
>
> Mechanical
> Mating 5/8-24 threaded coupling
> Cable Affixment Braid solder, set screw, clamp and crimp
>
>

3662. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 22:22:32 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <I615d.135$ek.12@okepread03>
Source record: 89083

"Bob Miller" <rmiller47@satx.rr.com> wrote
> On Thu, 23 Sep 2004 23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
> >But definitely the least kind of person in the world you would want in a
> >foxhole with you!
> >
> >>
> >> - Mike KB3EIA -
> >>
> >
> >Cheers,
> >
> >Jack Painter
> >Virginia Beach VA
> >
>
> Eh? What branch of the service were you in?
>
> bob
> k5qwg
>

Hello Eh? Try not to take what was only a political analogy too far out of context. Or are you starting a what branch of the service were you in thread? Reminds me of letters from kindergardeners to Veterans on Veterans Day. I get those from my nieces and nephews.

Jack

3663. Re: Tohtsu coaxial relays - anyone using?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-24 23:16:00 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <PU15d.17016$He1.14014@attbi_s01>
Source record: 89084

"Floyd Sense" <fsense***@risp.biz> wrote in message
news:cj26r9$m9k$1@news.chatlink.com...
> Thanks, but I've already covered that ground. The connectors are not
> threaded per the specs. I reported the problem to the dealer, and they
> told
> me that after checking their stock, they found that about half of the
> relays
> had incorrect threads on the connectors.
>
> So, if anyone is in the market for a coaxial relay and are considering
> Tohtsu, make sure that the seller tries a PL-259 on ALL THREE of the
> connectors on the relay. Hard to understand how a reputable machine
> company
> could make such a mistake, but it happened. The dealer, Nebraska Surplus
> Sales, stepped up to the problem immediately and is doing the right thing.
>
> 73, K8AC

Floyd -

I have heard of this problem from overseas mfg. (getting the 5/8 - 24
threads correct) .. which I am sure is realted to being more familair with
metric and not having the tools properly calibrated for English !

Glad to hear you are getting support for it. Another reason to consider the
Dow model 60 series for usage.

w9gb

3664. Re: Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 02:03:41 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10l9kf8dttjsc1a@corp.supernews.com>
Source record: 89085

Dear Neighbor:
I use the AEA-CIA. It might be a bit large to take up a tower, but I
have found it to be very useful.
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Roger Halstead" <Delete-Invallid.groups@tm.net> wrote in message

3665. Re: [OT] Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 02:19:57 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <i9l9l0p41o8nhtq2igagevhe7nado1gdui@4ax.com>
Source record: 89086

On Fri, 24 Sep 2004 18:22:32 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>
>"Bob Miller" <rmiller47@satx.rr.com> wrote
>> On Thu, 23 Sep 2004 23:20:34 -0400, "Jack Painter" <223bthp@cox.net>
>> wrote:
>>
>> >But definitely the least kind of person in the world you would want in a
>> >foxhole with you!
>> >
>> >>
>> >> - Mike KB3EIA -
>> >>
>> >
>> >Cheers,
>> >
>> >Jack Painter
>> >Virginia Beach VA
>> >
>>
>> Eh? What branch of the service were you in?
>>
>> bob
>> k5qwg
>>
>
>Hello Eh? Try not to take what was only a political analogy too far out of
>context. Or are you starting a what branch of the service were you in
>thread? Reminds me of letters from kindergardeners to Veterans on Veterans
>Day. I get those from my nieces and nephews.
>
>Jack
>

Just curious what branch ol' chickenhawk Jack served in -- we have too
many such people screwing up the country right now.

bob
k5qwg

3666. New version of APRSPoint available

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 12:12:40 UTC
From: aprspoint@yahoo.com
Message-ID: <ca957b73.0409250412.6da2ead9@posting.google.com>
Source record: 89087

APRSPoint 2.0 is available. It added support of track lines for station tracking, automatic TNC reconnect and TNC auto config, plus several fixes and enhancements. Visit http://www.aprspoint.com/ for details. Thanks.

3667. FS: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 13:38:52 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <Mxe5d.631460$Gx4.449089@bgtnsc04-news.ops.worldnet.att.net>
Source record: 89088
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

I have for sale a 40ft tower. I believe it may be a Rohn 25, it has
the bottom section which was cut off at the base, so its not quite 10
ft, 2 full 10ft sections and the tapered top section. This is a guide tower
and is NOT self supporting.
If your interested please email off group. If you like I can send u some
digital pics

thnx

pottsladd13@yahoo.com

3668. Re: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 14:24:21 UTC
From: Spell Checker <WTF32874@Hotmail.com>
Message-ID: <41557f99@post.usenet.com>
Source record: 89089
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

**** Post for FREE via your newsreader at post.usenet.com ****

"CommCtr1"
> ...so its not quite...

it's (as in "it is")

> ...is a guide tower...

guyed (as in "guy wire")

> If your interested...

you're (as in "you are")

-=-=-=

3669. Re: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 14:30:00 UTC
From: CommCtr1 <nospam@tome.com>
Message-ID: <Ihf5d.631575$Gx4.475260@bgtnsc04-news.ops.worldnet.att.net>
Source record: 89090
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

BITE ME!!!!!!!!!!!!!!!!!!!!! ASSHOLE!
"Spell Checker" <WTF32874@Hotmail.com> wrote in message
news:41557f99@post.usenet.com...
> **** Post for FREE via your newsreader at post.usenet.com ****
>
> "CommCtr1"
> > ...so its not quite...
>
> it's (as in "it is")
>
> > ...is a guide tower...
>
> guyed (as in "guy wire")
>
> > If your interested...
>
> you're (as in "you are")
>
>
>
>
>
> -=-=-=-

3670. Re: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 15:08:08 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <sRf5d.5210$%t3.1534@lakeread01>
Source record: 89091
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

"CommCtr1" <nospam@tome.com> wrote

> (deleted)!!!!!!!!!!!!!!!!!!!!!! (deleted)!

Leaves us wondering excactly what form of "communications" you are center
for.

Jack

> "Spell Checker" <WTF32874@Hotmail.com> wrote in message
> news:41557f99@post.usenet.com...
> > **** Post for FREE via your newsreader at post.usenet.com ****
> >
> > "CommCtr1"
> > > ...so its not quite...
> >
> > it's (as in "it is")
> >
> > > ...is a guide tower...
> >
> > guyed (as in "guy wire")
> >
> > > If your interested...
> >
> > you're (as in "you are")
> >
> >
> >
> >
> >
> > -=-=-=-

3671. Half slopers for 160 and 75 on one tower

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 19:29:41 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <qbhbl0l38h3qmlogcks6rfr75prqs4val4@4ax.com>
Source record: 89092

Yesterday I installed a half sloper for 160 with the top end anchored
near the top of my 97 foot tower. It could be beginner's luck, but
the thing works great.

I currently have two 75 meter half wave sloping dipoles (NE and NW)
which work very well, but the coax and baluns make them sag
considerably in the center.

I'm thinking of changing the 75 meter antennas to half slopers and
interspersing them with the 160s. IE...160 and NW, or would I be
better off using a lower attach point for the 75 meter half slopers?

Any one have any experience with these and any suggestions...before
the weather gets really cold.

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

3672. Re: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 21:23:43 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <zll5d.68229$9Y5.44064@fed1read02>
Source record: 89093
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

"CommCtr1" <nospam@tome.com> wrote in message
news:Ihf5d.631575$Gx4.475260@bgtnsc04-news.ops.worldnet.att.net...
> BITE ME!!!!!!!!!!!!!!!!!!!!! ASSHOLE!

More than one exclamation mark is a sure sign of a disturbed mind. <g>

--
Ed
WB6WSN

3673. Re: Amateur Radio contribution on 9/11/2001

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 21:41:26 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <aCl5d.68236$9Y5.21525@fed1read02>
Source record: 89094

"Peter" <microwaves@blueyonder.co.uk> wrote in message
news:4150a3ab.134751161@news.blueyonder.co.uk...
> On Mon, 20 Sep 2004 14:33:06 -0500, "Dave VanHorn"
> <dvanhorn@cedar.net> wrote:
>
>>
>>While I have no trouble believing that someone is working twoard this, you
>>might remember what we were told about how Russia was working to take over
>>here.. Turned out that they were being told that we were trying to take
>>them
>>over, and they were doing what they thought they had to do for self
>>defence..
>
>
> It's because the little boys in the Pentagon, the CIA and our MI5 and
> MI6 in the UK like to play war games. They haven't grown up. As you
> rightly imply, Mr Joe Average in any country just wants to live out
> his life in peace and quiet.

Absolute blather!

As for the average representative of the late Evil Empire being no different
than your typical Brit, I would ask how many civilian airliners has the MoD
ordered destroyed for getting too close to Scotland?

I saw the Arabs giving out candies in the streets on September 12th. There
IS something different about those people, and twenty verses of Kumbiyaah
will not change the evidence.

--
Ed
WB6WSN

3674. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 21:55:06 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <_Ol5d.68335$9Y5.57103@fed1read02>
Source record: 89095

"Bob Miller" <rmiller47@satx.rr.com> wrote in message
news:3dhuk0t6s77duar107hf191m50k6fbo67g@4ax.com...
> On Mon, 20 Sep 2004 15:44:06 -0400, "Jack Painter" <223bthp@cox.net>
> wrote:
>
>>
>>"Bob Miller" <rmiller47@satx.rr.com> wrote
>>
>> Tom Ring <news0000@taring.org> wrote:
>>> >Seems to me there is a big difference between people losing their
>>> >tempers, and drive by shootings by gang members, such as the fact that
>>> >normal citizens don't lose their tempers and shoot strangers.
>>> > If you
>>> >think they do, show me some evidence.
>>>
>>> Five shootings on the local TV news last night. Normal, reasonable
>>> law-abiding people getting mad and shooting both friends and strangers
>>> over trifle matters.
>>>
>>> Bob
>>> k5qwg
>>
>>Hi Bob, let me help you understand what "show me some evidence" means:
>>
>>Quote the stories with URLs so that we can decide for ourselves whether or
>>not these drug-dealing gang-banging criminal history numbnuts meet the
>>standard of "Normal, reasonable law-abiding people" or not.
>>
>>This was the anti-gun creeps biggest claim, that Americans all shoot each
>>other over an argument. It's a bunch of crap and anyone who spreads it is
>>too. But when you want to start trotting out the lies you've been fed I
>>will
>>gladly show you where each one has been debunked. At the end of the day,
>>you
>>are either going to be out of bunk or just go away.
>
> Jack, if you go here while these stories are up http://www.woai.com/
> see for yourself:

Yeah, but today's fun centers on a chain-saw attack. Completely baffles me
that two guys in a Texas bar can't come up with at least one shotgun!

--
Ed
WB6WSN

3675. Re: infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-25 22:06:01 UTC
From: iw5edi@libero.it
Message-ID: <672ced7f.0409251406.10c88692@posting.google.com>
Source record: 89096

Ron <dg1hvw@darc.de> wrote in message news:<41532435.1020709@darc.de>...
> hello all,
> is there anybody who can give me detailt information about the
> dimensions of a isotron-antenna for the 160m-band? any links or
> homebrew-descriptions?
> many tzhanks
> Ron DG1HVW

Try dxzone antenna homebrew pages...

http://www.dxzone.com/catalog/Technical_Reference/Antennas/

there is also a section on 160 mt antennas

http://www.dxzone.com/catalog/Technical_Reference/Antennas/160M/

73
iw5edi simone

3676. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 00:47:18 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <qko5d.69400$9Y5.25516@fed1read02>
Source record: 89097

"JLB" <IHateSpam@nospam.net> wrote in message
news:XMA4d.342$Nx2.210@fe39.usenetserver.com...
>
>
>
> "Fractenna" <fractenna@aol.com> wrote in message
> news:20040922181656.24246.00001035@mb-m02.aol.com...
>>
>> I am confused: are you saying that my comments contain errors? If so,
>> what
> is
>> incorrect?:-)
>>
>> Yes; OSU masters students in antennas are very good. I have one working
> for me
>> right now.
>>
>> 73,
>> Chip N1IR
>
>
> No, Chip.
>
> I do not see any errors in your comments.
>
> What I was saying was that building such a system as originally described
> is
> a daunting task. There are many problems to overcome, one of which is
> getting an antenna to work over a 25: 1 bandwidth with reasonably constant
> performance.

I regularly use an active 41" monopole to accurately measure electric field
strength over the range of 10 kHz to 30 MHz. That's a ratio of 3000:1, and
that is 25-year old technology.

--
Ed
WB6WSN

3677. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 00:49:31 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cj53mr$9fg$1@titan.btinternet.com>
Source record: 89098

It's no concern of ours, the rest of the World's 5 billion population, that 10 or 20 thousand Americans kill each other with firearms every year. What bothers us is the naturally aggressive tendency of Americans to export the habit of using weapons of mass destruction in futile attempts to educate people in the so-called American way of life.

Witness the mess in ex-Yugoslavia, Iraq, Palestine, Afganistan and numerous other places in this small world.

All activities in that direction are directed towards American energy interests only. Can't say that I blame you. It's human nature after all. But it's hardly altruistic as your politicians frequently claim.

But of course, it is not the ordinary American people who are to blame, it is just their multi-national corporations, their dishonest banks, their oil and energy companies, their pharmaceuticals, their tobacco and junk food industries, atmospheric polution, the armament industries, and the secret police, the 'unreliable' CIA information departments, etc., which constitute the problem.

Sort *them* out and the whole world will be a happier place and will thank you for it. But you've got an immense job on your hands. Terrorism is just a sideline which causes fewer problems than street traffic accidents and antique gun laws. Get things in proportion.

Just another foreigner without a vote in the forhcoming presidential election. But which affects me nevertheless.

Back to SWR, Reg, G4FGQ.

3678. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 01:22:27 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <nRo5d.53026$wV.44065@attbi_s54>
Source record: 89099

> Witness the mess in ex-Yugoslavia, Iraq, Palestine, Afganistan and
numerous
> other places in this small world.

Well Reg, I'd argue the point, but recognize the futility. Please observe however, in the countries listed above, which were the ones with English masters in the first place? Your forbearers have a lot to answer for and even in those closer to YOUR home, Scotland and Ireland.

W4ZCB

3679. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 01:57:06 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <Tlp5d.5311$%t3.3227@lakeread01>
Source record: 89100

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote

>
> > Witness the mess in ex-Yugoslavia, Iraq, Palestine, Afganistan and
> numerous
> > other places in this small world.
>
> Well Reg, I'd argue the point, but recognize the futility. Please observe
> however, in the countries listed above, which were the ones with English
> masters in the first place? Your forbearers have a lot to answer for and
> even in those closer to YOUR home, Scotland and Ireland.
>
> W4ZCB
>

Good start Harold! Allow me to pick up with it from there....

Reg, you also wrote:

"But of course, it is not the ordinary American people who are to blame, it is just their multi-national corporations, their dishonest banks, their oil and energy companies, their pharmaceuticals, their tobacco and junk food industries, atmospheric polution, the armament industries, and the secret police, the 'unreliable' CIA information departments, etc., which constitute the problem."

(first of all *thanks* for your personal absolution, we're relieved) <G>. But we should remind you that "our multi-national corporations" is a misnomer - they are, as you said, multi-national. Want to guess who is the biggest investor in US interests? Great Britain is, so they are "yours" old boy. And wasn't it M7 or some James Bond agency of yours that claimed there was a definite link to WMD/nuclear materials by Iraq? I know, you tell us all the time, it's George & Tony's fault, they made this stuff up at their supper club meetings. I know this is kind of unsettling for a fine chap as we know you are, but the next time you think America has some knd of monopoly on gun-toting, punked-out, drugged-out losers that actually manage to "vote" sometimes (always liberal just like you buddy), just check your London papers nce and awhile, and better yet, stroll downtown. My recollection is that London is just like NYC, NY, with a little bit of everything at any corner. As Harold said, God forbid you take that same stroll of exploration down an Ulster street during one of the little flare-ups of "the troubles". Even your police and your army riding in armor vehicles are not safe then - on your God-save-the-Queen Great Britain streets in broad daylight. My point is that in your own country you've got some of the most hideous examples of human behavior found anywhere in the world, even if you haven't chopped heads of (yet - your skyrocketing muslim

populaton cannot be far behind that plan). But most of us would argue that the begging-for-death tortures perpetrated on victims of your "troubles" might have been better off dead than suffered the circumstances of your british honour among terrorists.

73,

Jack Painter
Virginia Beach VA

3680. Re: Random Legth Receiving Only Ant.; Close Into A Loop ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 02:26:30 UTC
From: Peter Parker <parkerp@NOSPAMalphalink.com.au>
Message-ID: <415626ff$1@news.alphalink.com.au>
Source record: 89101

"Robert11" <rgsxrose@comcast.net> wrote in message
news:Jtidncrn_Zm6msncRVn-tQ@comcast.com...

> Would you expect better performance if it was formed into a loop ?
> Why ? (what "theory" or eq's would apply ?)

I have found that this reduces low frequency pick-up. Loops need to be approaching 1 wavelength around to work efficiently, whereas the wire would be OK as a 1/4 wave.

As to whether the signal to noise ratio will be better with the loop - well you'll just need to experiment ;)

73, Peter VK3YE

3681. Re: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 03:15:06 UTC
From: Spell Checker <WTF32874@Hotmail.com>
Message-ID: <41563443@post.usenet.com>
Source record: 89102
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

**** Post for FREE via your newsreader at post.usenet.com ****

"CommCtr1"
> BITE ME!!!!!!!!!!!!!!!!!!!! ASSHOLE!

It should be "Bite me, you asshole !"

-=-=-=

3682. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 05:08:07 UTC
From: richardharrison@webtv.net
Message-ID: <25113-41564EB7-208@storefull-3255.bay.webtv.net>
Source record: 89103

Reg, G4FGQ wrote:
"Just another Foreigner without a vote in the forthcoming presidential election. But which affects me nevertheless."

The U.S.A. affects everyone on earth due to the size and vigor of its economy and the development of its industry and military.

Anyone and everyone are concerned about forces in the neighborhood outside of their control.

Europeans suffered from crazy bloody wars long before Columbus found a "new world" across the sea. Warfare was not an invention of the U.S.A. To survive, a nation must become very good at war.

The U.S.A. was first to produce nuclear weapons and the intercontinental missles to accurately place them on target.

The 19th Century was dominated by the British. Two world wars followed by a cold war were the heritage of The British Century, that was experienced in the the 20th Century.

Twice in the 20th Century, the U.S.A. answered desparate calls from Britain and France to send Germany and its allies back to their homes.

Perhaps Britain and France could have done more to avoid the 20th Century conflicts. The U.S.A. had the least to do with establishing boundaries which have resulted in constant warfare.

President Hoover who had seen European operations while trying to feed Europe following the first war to end wars in the 20th Century, argued the U./S.A. was foolish allowing itself to become involved in Europe`s struggles. Hoover was committed to minimal involvement in foreign disputes. During the Hoover Administration, the U.S.A. was self-sufficient in oil and other commodities as a supplier and as a customer.

Then the great depression hit. The world owed the U.S.A. for the WW-1 weaponry supplied by the U.S.A. on credit, but only Finland paid. Times were tough and business wanted to import from cheaper sources and to export to markets that paid more than the U.S.A.. There was little interest in Hoover`s isolation.

Reg says: "Witness the mess in ex-Yugoslavia, Iraq, Palestine, Afghanistan and other places in the world."

Reg is blaming the Fire Department for the fires. It was not the U.S.A. which Balkanized the Balkans. Nor, was it the U.S.A. which partitioned Palestine. Nor, was it the U.S.A. which promised the Jews a homeland if

they would only support the Allied Cause in both world wars. Nor, was it the U.S.A. which tried to anex Afghanistan. Nor, was it the U.S.A. which tried to maintain a colonial control on French Indo-China in the face of advancing communism. Nor, was it the U.S.A. which insisted on selling dope to the Chinese when their government was dead set against it. As a former colony itself, the U.S.A. had no sympathy for colonialism.

Despite popular condemnation of the U.S.A., there is no great exodus of deserters, but instead there is a clamor from people the world over dieing to get in the U.S.A. by almost every imaginable means. As a person who has seen most of the world, I think the U.S.A. has come closer to the ideal place to live than any other place. Millions share my opinion. In fact, mavbe billions think the U.S.A. would be the best place to live despite the disadvantages of not being a native. If we in and from the U.S.A. must shoot a few punks to keep what we`ve been able to establish and keep so far, well that`s just too bad.

We are better because of free access to guns. Remember Sgt. York in WW-1? Well we had many other sharpshooters in WW-2 and other wars too! Many have been shooting real guns most of their lives.

Best regards, Richard Harrison, KB5WZI

3683. Re: 40ft tower in SE, Pa. $150.00

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 05:37:39 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040926013739.210$Bv@newsreader.com>
Source record: 89104
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.swap

Need more sig file.
>
"Spell Checker" <WTF32874@Hotmail.com> wrote:
> **** Post for FREE via your newsreader at post.usenet.com ****
>
> "CommCtr1"
> > BITE ME!!!!!!!!!!!!!!!!!!!! ASSHOLE!
>
> It should be "Bite me, you asshole !"
>
> -=-=-=-

3684. Yeasu ATAS-120 trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 07:49:10 UTC
From: WG <nojunk@mail.com>
Message-ID: <Wvu5d.156280$XP3.7129@edtnps84>
Source record: 89105

Hi All

I picked up a Yeasu ATAS-120 antenna for my Chevy Metro and my FT-100d. The trouble is that I can't get it to tune on 40m, 20m 10m and 6m. It has no trouble on the rest. I have tried different locations on the car and the mount is screwed to the front fender and no luck. Anyone else have this trouble and how did you correct it?

Thanks in advance

3685. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 08:04:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l64al01m3tiutmvddjjk2qqr18si87vvov@4ax.com>
Source record: 89106

On Sun, 26 Sep 2004 00:08:07 -0500, richardharrison@webtv.net (Richard Harrison) wrote:

>The U.S.A. had the least to do with establishing
>boundaries which have resulted in constant warfare.

Hi Richard,

This is not entirely true, but I will pick that up below.

>Then the great depression hit. The world owed the U.S.A. for the WW-1
>weaponry supplied by the U.S.A. on credit, but only Finland paid.

You should add that only Denmark paid their war debts for WWII while DeGaulle gave us the boot and the rest stubbed their toes in the dirt when this embarrassing question was brought up.

>Reg says: "Witness the mess in ex-Yugoslavia, Iraq, Palestine,
>Afghanistan and other places in the world."
>
>Reg is blaming the Fire Department for the fires. It was not the U.S.A.
>which Balkanized the Balkans.

Well, we were very closely involved through the agencies of Wilson's crew of young and up and coming savants he called "The Inquiry." This crew met in secret (sound familiar?) as the CFR (Committee of Foreign Relations) whose British arm was called the Royal Institute of International Affairs.

Members of the CFR included (familiar names only): Allen Dulles, John Foster Dulles, Christian Herter, Walter Lippman; and (unfamiliar names, but noted specialists): Dr. Isaiah Bowman, Chief Territorial Specialist. American Geographical Society; Dr. Clive Day, Regional Specialist for the Balkans; Dr. Charles H. Haskins, Regional Specialist for the northwestern frontiers; S. K. Hombeck, Regional Specialist for the Far East; Mark Jefferson, Chief Cartographer; Douglas W. Johnson, Specialist in Boundary Geography; Dr. W. E. Lunt, Regional Specialist for Italian boundaries.

Having heard of this group from both the left (Lewis Lapham, Harpers) and right (Phillip Gold, "Taking Back the Right") - if we weren't responsible for the Balkans/Middle East it is only because we didn't try hard enough nor fast enough (or simply allowed surrogates to accomplish the same agenda - AKA RIIA). Anyway, from the list of map makers and boundary experts above, it is obvious we weren't looking to document the return of the Elgin Marbles.

>Nor, was it the U.S.A. which
>tried to maintain a colonial control on French Indo-China in the face of
>advancing communism.

From "The Viet Cong Insurrection Manual...," Gen. Vo Nguyï¿½n Giap:
"The French Imperialists were getting more and more bogged down
in their unjust war of aggression. American aid, which covered
15% of the expenditure on this war in 1950 and 1951, rose to 35%
in 1952, 45% in 1953, soon to reach 80% in 1954... [Dien Bien Phu
the most heavily fortified bastion of the French was wiped out
8 May 1954]"

Much of this was validated independently by American sources in the
mid 1960's and a source of several books by William Lederer and
Eugene Burdick ("The Ugly American," "Sarkhan").

>
>We are better because of free access to guns. Remember Sgt. York in
>WW-1?

I remember Howard Hawks' treatment of him as the Pacifist (Quaker) who
killed more than 100 Germans (played by Gary Cooper). In fact MANY
movies present Hawks with an hommage through the inclusion of the
sharp shooter licking his thumb to clear the front sight of his rifle
(it is done by John Dall in "Gun Crazy").

There are few here who probably are aware that the Iraqis are
GUARANTEED by our military the possession of an Assault rifle, one
each for EVERY adult in the household. Phillip Gold has offered this
is the bare necessity for them to survive their own tribal conflicts
(Iraqis have absolutely no sense of nationhood).

73's
Richard Clark, KB7QHC

3686. Re: infos needed for isotron-antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 08:30:33 UTC
From: Ron <dg1hvw@darc.de>
Message-ID: <41567E29.6020808@darc.de>
Source record: 89107

Max schrieb:

> Try dxzone antenna homebrew pages...
>
> http://www.dxzone.com/catalog/Technical_Reference/Antennas/
>
> there is also a section on 160 mt antennas
>
> http://www.dxzone.com/catalog/Technical_Reference/Antennas/160M/
>
> 73
> iw5edi simone

thank you very much. thats what i want.
Ron

3687. Re: half-wave dipole in the forest; Reg on World citizenship

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 08:47:45 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <qtv5d.74716$9Y5.12469@fed1read02>
Source record: 89108

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:l64al01m3tiutmvddjjk2qqr18si87vvov@4ax.com...
> On Sun, 26 Sep 2004 00:08:07 -0500, richardharrison@webtv.net (Richard
> Harrison) wrote:
>
>>The U.S.A. had the least to do with establishing
>>boundaries which have resulted in constant warfare.
>

SNIP

> There are few here who probably are aware that the Iraqis are
> GUARANTEED by our military the possession of an Assault rifle, one
> each for EVERY adult in the household. Phillip Gold has offered this
> is the bare necessity for them to survive their own tribal conflicts
> (Iraqis have absolutely no sense of nationhood).
>
> 73's
> Richard Clark, KB7QHC

Here in the Peoples Republic of California, you can't even have a weapon
that LOOKS like an assault rifle. Because of that, we are respected the
world-over for being the safest region of the USA.

Meanwhile, did somebody forget to tell the Iraqis that they were supposed to
turn in all RPG's? Or maybe they just didn't understand the turn-in process?

--
Ed
WB6WSN

3688. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 11:43:48 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10ldaslatitmj53@corp.supernews.com>
Source record: 89109

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:25113-41564EB7-208@storefull-3255.bay.webtv.net...
snip
> The U.S.A. was first to produce nuclear weapons and the intercontinental
> missles to accurately place them on target.
snip
> Best regards, Richard Harrison, KB5WZI
>
And a large and crucial part of the talent pool that developed the bomb and
the ICBM was in the USA because they had literally escaped from Europe. Can
you say Enrico Fermi?
My fellow hams, we're all in this avalanche together.
73
H.
NQ5H

3689. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 12:35:27 UTC
From: w1xyz@aol.com
Message-ID: <20040926083527.01852.00001224@mb-m13.aol.com>
Source record: 89110

Here is a link to a prior art antenna device comprised of carbon nanotubes.

I am surprised so many hams do not distinguish between antennas and devices like photodiodes.

A nano-antenna can be used without a lens. Groups of nano-antennas can be used to make gain antennas, directional antennas, and steerable antennas, but you knew that from the ARRL Antenna Book. Antennas can be connected to junctions that can then detect, mix, modulate, upconvert, downconvert, and the antenna elements can be tuned to length so they favor certain wavelengths. Lots of information can be sent.

Lightwave-scaled antennas can be biased to switch light. They are quite fast!

There is also a shortening effect that hams already know about at radio wavelengths that is more pronounced at light wavelengths, essentially due to the inertia of the electron. Even so, practical antennas can be made by growing them to length on a substrate, such as silicon. I have been working on this since the mid-90's.

Oh, the links

www.ambitcorp.com

has a list of some prior art patents in that area.

You can also look up W1XYZ in

www.qrz.com and see some more stuff that is related.

IBM's Phil Hobbs may be putting this to work to try to eliminate board to board or chip to chip interconnects which is a worthy goal. Phil is right as we did our first demo about a decade ago. How time flies.

Robert J Crowley

w1xyz

3690. 88 ft. Doublet Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 13:22:15 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <boz5d.22893$6X1.16042204@news4.srv.hcvlny.cv.net>
Source record: 89111

Does an 88 ft. doublet have any advantage over a conventional 67 ft.
doublet? In either case, feedline would be approx. 50 ft. of 450 Ohm ladder
line to a 4:1 current balun, then a short length of coax into the shack.

My usual band of choice is 40, but I'd like to become more active on 20 and
30.

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3691. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 13:23:30 UTC
From: Dog - nothing but dogs !! <How_small_is_it3087@Hotmail.com>
Message-ID: <4156c2d5@post.usenet.com>
Source record: 89112

**** Post for FREE via your newsreader at post.usenet.com ****

Ref:
http://edition.cnn.com/2004/TECH/science/09/17/light.antenna.reut/index.html

"W1XYZ"
> I am surprised so many hams do not distinguish between
> antennas and devices like photodiodes. <snip>

Me too. I'm not sure if they've 'lost it', or if they're just playing
troll.

> Here is a link to a prior art antenna device...
> www.ambitcorp.com
> has a list of some prior art patents in that area.
> You can also look up W1XYZ in
> www.qrz.com and see some more stuff that is related.

(It would be slightly more fair if you had included an advance disclaimer
that the link was to YOUR company. Not a serious issue, but it took me a
minute to realize that you're referencing your own work (or that of your
company). Interesting links just the same...)

By their very nature (especially American) patents are intentionally not
forthcoming about what has actually been accomplished and what might be
claim-stretching brochure-ware. Can you please confirm exactly when (year)
you achived an actual physical embodiment of a functioning carbon nanotube
antenna with dimensions corresponding to visible light? I'm sorry if I seen
to be poo-poo'ing, but I didn't see that precise question answered on the
provided links. I did see mention of larger structures. A more-precise
link would be helpful in this regard.

If you can do that, then I'll award you the 'mythical $50k' and admit
defeat.

Also, the group that was mentioned on the CNN news was from Boston, MA and
you appear to be from that same area. Any relationship between these two
(?) groups. Have you ever had contact with them on this topic?

> Phil is right as we did our first demo about a
> decade ago. How time flies.

I'm just trying to establish if your links to 'prior art' are strictly valid
(in the 'been there, done that, got the T-shirt' sense) or if they are the
sort of thing (in the sense of 'close, but no cigar' sense) that happens
with ANY new development. There's always a dozen or more groups working on
the same thing at any one time, but usually only one crosses a significant

boundary first and issues press releases to CNN.

I appreciate your posting and I look forward to seeing your next.

-=-=-=

3692. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 14:09:27 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <r4A5d.1845$ek.441@okepread03>
Source record: 89113

"Richard Clark" <kb7qhc@comcast.net> wrote

> There are few here who probably are aware that the Iraqis are
> GUARANTEED by our military the possession of an Assault rifle, one
> each for EVERY adult in the household. Phillip Gold has offered this
> is the bare necessity for them to survive their own tribal conflicts
> (Iraqis have absolutely no sense of nationhood).
>
> 73's
> Richard Clark, KB7QHC

Hi Richard, why do you assume that few of us know that every Iraqi household is allowed to have at least one weapon? It was widely publicized on all the networks early in the war. Furthermore, no one is "guaranteed" a weapon. The Swiss government guarantees (this means they provide) an automatic weapon in the home of each militia-age adult male, no other government or military that I am aware of makes such guarantee. Concientious objectors (their equivalent) must perform civil service for a period equal to compulsory militia training for all others.

Incidentally, the same exact permission given in Iraq was granted to Afghan households, and we merely continued the practice of not disarming a liberated populace.

73,
Jack

3693. Re: Yeasu ATAS-120 trouble

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 14:58:21 UTC
From: Kingfish <nospam@nospam.net>
Message-ID: <c4mdl0pa27nn207qvo4hislpl3fql1arpn@4ax.com>
Source record: 89114

There is a yahoogroups.com group for the ATAS antennas. Search for
ATAS, join and post your question. There are lots of users there.
Kingfish

On Sun, 26 Sep 2004 07:49:10 GMT, "WG" <nojunk@mail.com> wrote:

>Hi All
>
>I picked up a Yeasu ATAS-120 antenna for my Chevy Metro and my FT-100d. The
>trouble is that I can't get it to tune on 40m, 20m 10m and 6m. It has no
>trouble on the rest. I have tried different locations on the car and the
>mount is screwed to the front fender and no luck. Anyone else have this
>trouble and how did you correct it?
>
>Thanks in advance
>

3694. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 16:18:28 UTC
From: fractenna@aol.com
Message-ID: <20040926121828.01009.00001578@mb-m06.aol.com>
Source record: 89115

>I regularly use an active 41" monopole to accurately measure electric field
>strength over the range of 10 kHz to 30 MHz. That's a ratio of 3000:1, and
>that is 25-year old technology.
>
>--
>Ed
>WB6WSN
>

And your variation of gain, excluding mismatch, is...?

73,
Chip N1IR

3695. Re: 88 ft. Doublet Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 16:58:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hnsdl01c3bma8m6buroob4he8ft0dp73h8@4ax.com>
Source record: 89116

On Sun, 26 Sep 2004 13:22:15 GMT, "Bert Craig"
<wa2si@optonline.netNOSPAM> wrote:

>Does an 88 ft. doublet have any advantage over a conventional 67 ft.
>doublet? In either case, feedline would be approx. 50 ft. of 450 Ohm ladder
>line to a 4:1 current balun, then a short length of coax into the shack.
>
>My usual band of choice is 40, but I'd like to become more active on 20 and
>30.

Hi Bert,

Short answer: No. [could be Yes]

Long answer: Yes. [could be No]

More details are needed to lengthen the short answer or shorten the
long answer. Are you pointed in the right direction? A longer
antenna can invalidate that. Can you load the antenna? A longer
antenna can invalidate that. Going to higher bands makes these
questions even more meaningful.

Advice: Leave it alone, or put it up higher.

73's
Richard Clark, KB7QHC

3696. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 17:11:29 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10ldu33qruf8iae@corp.supernews.com>
Source record: 89117

"Jack Painter" <223bthp@cox.net> wrote in message
news:r4A5d.1845$ek.441@okepread03...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote
>
> > There are few here who probably are aware that the Iraqis are
> > GUARANTEED by our military the possession of an Assault rifle, one
> > each for EVERY adult in the household. Phillip Gold has offered this
> > is the bare necessity for them to survive their own tribal conflicts
> > (Iraqis have absolutely no sense of nationhood).
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Hi Richard, why do you assume that few of us know that every Iraqi
household
> is allowed to have at least one weapon? It was widely publicized on all
the
> networks early in the war. Furthermore, no one is "guaranteed" a weapon.
The
> Swiss government guarantees (this means they provide) an automatic weapon
in
> the home of each militia-age adult male, no other government or military
> that I am aware of makes such guarantee. Concientious objectors (their
> equivalent) must perform civil service for a period equal to compulsory
> militia training for all others.
>
> Incidentally, the same exact permission given in Iraq was granted to
Afghan
> households, and we merely continued the practice of not disarming a
> liberated populace.
>
> 73,
> Jack
>
>
I have a Springfield Armory M1A (AKA M14 but semi-auto) myself.
Excellent pig gun.
73
H.

ob antenna:
Just got a new (to me) Alpha 87A running with my Orion.
Reflected power from the SteppIR vertical on 20 meters is less than 10 watts

at resonance.
SWR ~ 1.07:1 I think. Sweet.
The antenna is mounted at the peak of a 3500 sq ft Al roof.
It has been blown down once by winds violent enough the pull 1/4" lag screws
from a 2x4.
No damage, put it back up with better guys.

3697. Rohn tower as vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 17:24:57 UTC
From: t_ashland@yahoo.com
Message-ID: <6e6aeba9.0409260924.287c77b2@posting.google.com>
Source record: 89118

Hi! To make a long story short, I will be moving my beam to another tower, and will have a rohn 25g tower that is imbedded in concrete approximately 50 feet away from the house. I would like to get a decent lower band antenna (not 160). I'm wondering what would be the best scenario:

1. Put up a mast above the 32 feet of tower and hang an inverted V (Alpha Delta 80/40) and 30 meter inverted V (common feed). It would be up around 40 feet.

2. Put my Butternut HF2V vertical up on top of the tower and put a few resonant radials for 80 and 40 on it. It wouldn't be guyed (important here in NW Iowa). I thought about even using the 80/40 dipole as part of the radials since I already have the antenna. (Anybody have any experience with loaded radials?) My HF2V vertical ground mounted didn't seem to cut it the last two winters...

3. Load the tower for 80, 40, and 30. I would need some guidance on how to build a gamma match for this situation. If I went this route, It would probably not work well for 80.

4. Extend a mast on top, and string some sort of Inverted L's for 80, 40, and 30 and put ground radials at the base.

My primary interest is to increase my DX totals especially on 80 since I already have DXCC on most of the other bands. I have a decent antenna for the higher bands.
Thanks
Terry, WK0F

3698. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 17:54:36 UTC
From: JLB <IHateSpam@nospam.net>
Message-ID: <nnD5d.299$qL3.88@fe39.usenetserver.com>
Source record: 89119

"Fractenna" <fractenna@aol.com> wrote in message
news:20040926121828.01009.00001578@mb-m06.aol.com...
> >I regularly use an active 41" monopole to accurately measure electric
field
> >strength over the range of 10 kHz to 30 MHz. That's a ratio of 3000:1,
and
> >that is 25-year old technology.
> >
> >--
> >Ed
> >WB6WSN
> >
>
>
>
> And your variation of gain, excluding mismatch, is...?
>
> 73,
> Chip N1IR
>
>

And that should be complex gain, since in the stated application you are
concerned about phase and magnitude.

Also, don't forget about the mutual coupling between elements. What happens
to it over a 3000 to one bandwidth? Remember we are talking about an array
of antennas, not a single isolated one!

--
Jim
N8EE

to email directly, send to my call sign at arrl dot net

3699. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 18:12:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ge1el0t2cajelsdg4i4b752rg084o1mb1k@4ax.com>
Source record: 89120

On 26 Sep 2004 12:35:27 GMT, w1xyz@aol.com (W1xyz) wrote:

>Even so, practical antennas can be made by
>growing them to length on a substrate, such as silicon. I have been working on
>this since the mid-90's.

Hi Robert,

What is the yield rate?

73's
Richard Clark, KB7QHC

3700. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 18:19:27 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10le20o7gnbet97@corp.supernews.com>
Source record: 89021

Ed's one meter vertical over a large conductive ground plane has an
effective height of close to 0.5 meters up to something like 20 MHz. With
an amplifier at the base of the vertical that has high input impedance and
some tailored feedback, one can have a system that can be used to measure
field strength with very little frequency dependence.
I use a miniaturized version of such an antenna as a probe in a TEM
cell.

I have seen the use of resistively loaded (short) dipoles connected to
resistively loaded transmission lines used by the NBS (as it was then
called) to measure field strength with minimum disturbance to the field.

These are all receiving antennas with essentially uniform performance
over very large frequency spans.

My feeling is that to have a small variation in transmitting gain over
more than something like five to one will require an adaptive antenna
system. (I am assuming antennas with an "average" gain that is close to
one - no resistive loading.) 73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Fractenna" <fractenna@aol.com> wrote in message
news:20040926121828.01009.00001578@mb-m06.aol.com...
> >I regularly use an active 41" monopole to accurately measure electric
field
> >strength over the range of 10 kHz to 30 MHz. That's a ratio of 3000:1,
and
> >that is 25-year old technology.
> >
> >--
> >Ed
> >WB6WSN
> >
>
> And your variation of gain, excluding mismatch, is...?
>
> 73,
> Chip N1IR

3701. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 19:09:10 UTC
From: fractenna@aol.com
Message-ID: <20040926150910.21613.00001249@mb-m10.aol.com>
Source record: 89022

>Ed's one meter vertical over a large conductive ground plane has an
>effective height of close to 0.5 meters up to something like 20 MHz. With
>an amplifier at the base of the vertical that has high input impedance and
>some tailored feedback, one can have a system that can be used to measure
>field strength with very little frequency dependence.
> I use a miniaturized version of such an antenna as a probe in a TEM
>cell.
>
> I have seen the use of resistively loaded (short) dipoles connected to
>resistively loaded transmission lines used by the NBS (as it was then
>called) to measure field strength with minimum disturbance to the field.
>
> These are all receiving antennas with essentially uniform performance
>over very large frequency spans.
>
> My feeling is that to have a small variation in transmitting gain over
>more than something like five to one will require an adaptive antenna
>system. (I am assuming antennas with an "average" gain that is close to
>one - no resistive loading.) 73 Mac N8TT
>
>--
>J. Mc Laughlin; Michigan U.S.A.
>Home: JCM@Power-Net.Net
>"Fractenna" <fractenna@aol.com> wrote in message
>news:20040926121828.01009.00001578@mb-m06.aol.com...
>> >I regularly use an active 41" monopole to accurately measure electric
>field
>> >strength over the range of 10 kHz to 30 MHz. That's a ratio of 3000:1,
>and
>> >that is 25-year old technology.
>> >
>> >--
>> >Ed
>> >WB6WSN
>> >
>>
>> And your variation of gain, excluding mismatch, is...?
>>
>> 73,
>> Chip N1IR
>

The array is RX only, and G/T is important for each individual element, over a broad range. You need a truly compact element that is wideband. Wideband means about the same gains and impedances across a very wide range.

Mediocre broadband RX antennas have been around since WWII.

The discussion on TX, albeit interesting, does not apply.

Also, mismatch produces dramatic signal drops without an ATU in conventional designs, such as inverted V's. The assumption has been 'no ATU' in this project, because the costs are prohibitive.

The one mitigating issue is that the sky temperature --and this system is designed to synthesize a measurement sky tempertaure with high angular resolution--increases with lower frequency (below about 1GHz) because the emission is non-thermal. Thus the signal to noise gets better in VHF.

73,
Chip N1IR

3702. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 19:10:58 UTC
From: fractenna@aol.com
Message-ID: <20040926151058.21613.00001250@mb-m10.aol.com>
Source record: 89023

>Here is a link to a prior art antenna device comprised of carbon nanotubes.
>
>
>I am surprised so many hams do not distinguish between antennas and devices
>like photodiodes.
>
>A nano-antenna can be used without a lens. Groups of nano-antennas can be
>used
>to make gain antennas, directional antennas, and steerable antennas, but you
>knew that from the ARRL Antenna Book. Antennas can be connected to junctions
>that can then detect, mix, modulate, upconvert, downconvert, and the antenna
>elements can be tuned to length so they favor certain wavelengths. Lots of
>information can be sent.
>
>Lightwave-scaled antennas can be biased to switch light. They are quite
>fast!
>
>There is also a shortening effect that hams already know about at radio
>wavelengths that is more pronounced at light wavelengths, essentially due to
>the inertia of the electron. Even so, practical antennas can be made by
>growing them to length on a substrate, such as silicon. I have been working
>on
>this since the mid-90's.
>
>Oh, the links
>
>www.ambitcorp.com
>
>has a list of some prior art patents in that area.
>
>You can also look up W1XYZ in
>
>www.qrz.com and see some more stuff that is related.
>
>IBM's Phil Hobbs may be putting this to work to try to eliminate board to
>board
>or chip to chip interconnects which is a worthy goal. Phil is right as we
>did
>our first demo about a decade ago. How time flies.
>
>Robert J Crowley
>
>w1xyz
>

Interesting work, Bob. What is the relative efficiency (in collection) compared to photovoltaics?

73,
Chip N1IR

3703. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 19:13:45 UTC
From: fractenna@aol.com
Message-ID: <20040926151345.21613.00001251@mb-m10.aol.com>
Source record: 89024

>(It would be slightly more fair if you had included an advance disclaimer
>that the link was to YOUR company. Not a serious issue, but it took me a
>minute to realize that you're referencing your own work (or that of your
>company). Interesting links just the same...)
>

Huh? So what? I don't get it. Why the need for a disclaimer? What should the disclaimer be? What's wrong with Bob referring to his own work?

73,
Chip N1IR

3704. Re: President George Bush Assasinated <--- VIRUS

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 19:48:25 UTC
From: Bob <nowhere@nospam.org>
Message-ID: <Q1F5d.2266$MD5.110949@news20.bellglobal.com>
Source record: 89026
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This was a virus.

3705. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 20:04:18 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <GaF5d.14256$3n.4931@okepread06>
Source record: 89025

Jack Painter <223bthp@cox.net> wrote in message news:8JG4d.3993$%t3.731@lakeread01...
>
> Unsubstantiated crap or the word of God

Pretty much the same thing, isn't it?

It seems this NG has gone the way of the
rest: the division between the born-again
zealots vs. the normal folks, and the resulting
degradation in human interaction. What a pity!

The zealots are unintentionally giving the
mega-corps and the mega-rich the power to
virtually run this country. Being in absolute
control of the FCC, what they will eventually
do with the radio spectrum (in the interest of
mega-profits) will not be in the interest of
amateur radio - the BPL boondoggle, is a
precursor and good example of what to
expect from an exclusively neo-con, pro
mega-corp government.

It seems apparent that every so often, we
as a people, must re-learn a valuable lesson:
religion should have no power or influence
in the politics of a democracy!

How are you Bushites going to react when
you realize you've been duped into helping
turn this country into a plutocracy -
theological or not?

Just my opinion, of course...

Chuck, WA7RAI

3706. Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 20:08:39 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj77k70jjo@enews1.newsguy.com>
Source record: 89027

Hi, Gurus -

Shown in "Antennas for All Applications" on page 820, figure 23-17 (a) is a folded dipole which looks as if it could be easily constructed from RG58. This antenna would be appealing because of the natural balun. However, they make no mention of the required coax velocity factor nor of the terminal impedance. I tried constructing one and measuring with a vector voltmeter but the data were inconclusive. That is, I don't think I know how to make measurements like this at 440 MHz yet. It is much trickier than I thought.

In any case, can someone tell me:

- Can RG58 be used, or will the velocity factor mess up the antenna?
- What will be the terminal impedance?
- Will the terminal impedance change as the gap between the elements vary?

(I consider the "terminal" at the midpoint of the bottom element)

Thanks.

John (KD5YI)

BTW, I can post a picture tomorrow or the next day, if necessary, when I can lay hands on a computer with a scanner.

J

3707. Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 20:24:40 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj78i80ki5@enews1.newsguy.com>
Source record: 89029

Hi again!

Has anyone tried making the coiled coax balun work at UHF? Specifically, on the 70 cm band.

In "Antennas for All Applications", they say the coil should be resonant at the frequency of operation. The ARRL book(s) do not cover this band. Using RG58 and a GDO, I've learned that one cannot leave long leads on one's coax coil as it will lower the resonant frequency drastically. Apparently, the long leads in conjunction with the coil forms an antenna/inductor/capacitor combination.

It appears to be difficult to obtain the required resonance repeatably. Or, am I missing something (as usual)?

The diameter seems to be somewhat critical. Does the diameter need to be much, much smaller than a quarter wave? What diamter would be a maximum?

Thanks for any help.

John (KD5YI)

3708. Re: President George Bush Assasinated

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 20:43:58 UTC
From: Steve <lafayetteradio4@optonline.net>
Message-ID: <41572B20.6EDABA82@optonline.net>
Source record: 89028
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

OH PLEASE, YET ANOTHER VIRUS ATTEMPT.
YOU MUST THINK WE ARE ASSHOLES.
LET ME GUESS, KERRY NEXT WEEK??

news@CNN.com wrote:

> Early this morning two CNN Journalists discovered the CCTV footage that will shock the world. At 3.29am President George Bush was shot dead by an Islamic Militant suspected of working for Al-Qaida. As yet to be released to the nation due to the governments concerns over national Security, CNN has decided to inform the public of this terrible event. A short CCTV clip as evidence of this tragedy has been posted here and there will be more updates to follow as the news filters through.
>
> Name: CCTV-Assasination.zip
> CCTV-Assasination.zip Type: Zip Compressed Data (application/x-zip-compressed)
> Encoding: x-uuencode

3709. FS - FORCE 12 ZR-3 Vertical on eBay - for pick up in Denver, Colorado only

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 20:59:41 UTC
From: k0owo.bill@gmail.com
Message-ID: <21c32c64.0409261259.28c1a824@posting.google.com>
Source record: 89030

Hi,

I have my Force 12 ZR-3 Vertical-Dipole listed on eBay. There is a good description and a great photo of the antenna.

This is a high preformance - low profile antenna so it is ideal for antenna restricted locations.

The antenna is fully assembled and ready for use. Just plug in your coax and start transmitting. It even comes with the recommended ground mount at no extra cost.

You have to pick this antenna up at my location in the Denver, Colorado area. You will need a pickup truck or small trailer.

Click on this link to see the antenna:
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=5722807374&ssPageName=STRK:MESE:IT

If the link does not work for you, just go to http://ebay.com and do a search for: zr-3

Thanks,

Bill

3710. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 21:25:12 UTC
From: markd@toad-net.com
Message-ID: <415733b7$0$250$4d5ecec7@reader.city-net.com>
Source record: 89033
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Dorm room, noise hell, lighting fixtures, computers, digital devices, wall warts, power lines, distribution lines, transformers for building equipment, radios, tvs, etc. all conspire to make radio reception a bit dicy fro all the rfi produced. The wire just makes reception of all those nearby sources all the better. Try grounding to a known ground, a transformer is not likely to help, it doesn't distinguish all the noise sources from other signals. Get battery power and pull the main breaker for the building.

>Hey -
>
>I posted in here recently about active shortwave antennas - well, I
>managed to get 75 feet of #26 magnet wire on a perpendicular roof to
>my window of my dorm room, and two runs of 15' speaker wire as a
>counterpoise in my room. I'm getting a really bad noise problem,
>however - so bad that I can't hear stations on 20 meters! There's a
>pretty solid S9 noise floor that prevents me from hearing anything
>other than WWV and the major broadcast stations. Now, I know I can do
>better with the amount of wire I've got strung out there.
>
>I was thinking about adding one of those 9:1 transformers or other
>impedance matching things for longwires; would this reduce the noise
>problem I'm having? Any other tips for reducing longwire noise? It
>works enough, but I know I can do better...
>
>
>Thanks in advance.

3711. Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 21:55:49 UTC
From: micropower_fm@hotmail.com
Message-ID: <45cc755c.0409261355.67a5a37f@posting.google.com>
Source record: 89031
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Hey -

I posted in here recently about active shortwave antennas - well, I managed to get 75 feet of #26 magnet wire on a perpendicular roof to my window of my dorm room, and two runs of 15' speaker wire as a counterpoise in my room. I'm getting a really bad noise problem, however - so bad that I can't hear stations on 20 meters! There's a pretty solid S9 noise floor that prevents me from hearing anything other than WWV and the major broadcast stations. Now, I know I can do better with the amount of wire I've got strung out there.

I was thinking about adding one of those 9:1 transformers or other impedance matching things for longwires; would this reduce the noise problem I'm having? Any other tips for reducing longwire noise? It works enough, but I know I can do better...

Thanks in advance.

3712. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:04:58 UTC
From: Dog - nothing but dogs !! <Q87348g23j43@Hotmail.com>
Message-ID: <41573d0c$1@post.usenet.com>
Source record: 89032

**** Post for FREE via your newsreader at post.usenet.com ****

"Dogs - nothing but dogs !!"
>> I claim utter victory.
>> Thanks for playing.

"Frank" <fmerriman@nycny.net>
> "Winning an argument on the Internet is like
> winning at the Special Olympics; you're still
> a retard." ~ Anonymous...

Tsk tsk tsk...

Ignoring the complete lack of compassion for those encumbered with severe difficulties in life, your posting leads to the conclusion that we might as well wrap-up the newsgroups, especially RRAA, and go home.

-=-=-=

3713. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:15:20 UTC
From: Dog - nothing but dogs !! <Q87348g23j43@Hotmail.com>
Message-ID: <41573f7a@post.usenet.com>
Source record: 89034

**** Post for FREE via your newsreader at post.usenet.com ****

"Fractenna"
> Interesting work, Bob. What is the relative efficiency
> (in collection) compared to photovoltaics?

Pending a response from W1XYZ, I'll propose that the answer is likely to be
that you're rather naive to assume that he - or his company - is that far
along with THAT technology (light antennas to replace photovoltaic cells).
I might be wrong, but I'll put it out there and we'll see.

-=-=-=

3714. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:18:21 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-6CE07E.15182026092004@newssvr13-ext.news.prodigy.com>
Source record: 89035
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <45cc755c.0409261355.67a5a37f@posting.google.com>,
micropower_fm@hotmail.com (TheGnome) wrote:

> Hey -
>
> I posted in here recently about active shortwave antennas - well, I
> managed to get 75 feet of #26 magnet wire on a perpendicular roof to
> my window of my dorm room, and two runs of 15' speaker wire as a
> counterpoise in my room. I'm getting a really bad noise problem,
> however - so bad that I can't hear stations on 20 meters! There's a
> pretty solid S9 noise floor that prevents me from hearing anything
> other than WWV and the major broadcast stations. Now, I know I can do
> better with the amount of wire I've got strung out there.
>
> I was thinking about adding one of those 9:1 transformers or other
> impedance matching things for longwires; would this reduce the noise
> problem I'm having? Any other tips for reducing longwire noise? It
> works enough, but I know I can do better...
>
>
> Thanks in advance.

You are in a tough spot with all the computers and other electronics
around. A common mode antenna is the worst choice for you as the S9
noise floor attests.

A small active loop in the quietest spot in your room or on the roof if
you manage it would work the best. I would be surprised if a transformer
would help you much on the wire because I expect that the antenna itself
is picking up the majority of the noise. An exception to this would be
if that 75 feet of wire on the perpendicular roof is a garage and not
other rooms full of computer equipment.

--
Telamon
Ventura, California

3715. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:26:18 UTC
From: Dog - nothing but dogs !! <Q87348g23j43@Hotmail.com>
Message-ID: <4157420d@post.usenet.com>
Source record: 89036

**** Post for FREE via your newsreader at post.usenet.com ****

"Fractenna"
> Huh? So what? I don't get it. Why the need for a
> disclaimer? What should the disclaimer be? What's
> wrong with Bob referring to his own work?

I didn't notice that Ambit was ~his~ company until I got to the 'About Us'
page. I overstated the issue. Apologies to W1XYZ.

I'm still awaiting further links that he or his company actual beat the
other team [per CNN news].

-=-=-=

3716. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:41:04 UTC
From: swrlabs@aol.com
Message-ID: <20040926184104.01624.00001436@mb-m28.aol.com>
Source record: 89037

I don't work in the area of photovoltaic cells at all - just not interested in that area, though I think it is a worthy subject.

I do work with antenna like nanostructures for detection, reradiation, etc.

Bob

3717. Re: Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:50:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kbtbl0t2cfl2s6ja5bbvh2r13bdnasdge1@4ax.com>
Source record: 89038

On Sun, 26 Sep 2004 15:08:39 -0500, "John Smith"
<kd5yikes@mindspring.com> wrote:

>Hi, Gurus -
>
>Shown in "Antennas for All Applications" on page 820, figure 23-17 (a) is a

Hi John,

Are you sure of the title? Author?

73's
Richard Clark, KB7QHC

3718. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:51:30 UTC
From: johnn3twn@aol.comnospam
Message-ID: <20040926185130.03437.00000697@mb-m27.aol.com>
Source record: 89039

>Please allow me to apologize in advance, but I can't resist asking:
>
> "If a dipole falls in a forest and there's no one there to hear it,
>does it make a sound?"
>

Yes, the sound of its owner swearing up a blue storm at having to get the *&%$ thing back up over "just the right tree branches"....

Been using a "random" dipole (actually configured in an inverted vee with 50 foot legs) made from insulated house wire, fed with 450 ohm line, hooked to a little MFJ tuner. QTH is DEEP in the woods and the antenna is VERY close to trees and actually passes within inches of many leaves/branches. Work mostly 40 CW but every so often will wander around from 80 to 10 CW and SSB. Sure, I'll never have a "big gun" signal with this antenna, but it works, its cheap and easy, and I can always find someone to chat with. Once and a while, I even manage to snag some pretty fair DX.

The only thing I try to avoid is letting the antenna actually touch any thing.

Good luck and good DX

de N3TWN John

3719. Re: FS - FORCE 12 ZR-3 Vertical on eBay - for pick up in Denver, Colorado only

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:52:44 UTC
From: darleyput@hotmail.com
Message-ID: <cj7h88$8go$1@newsg3.svr.pol.co.uk>
Source record: 89040

the cute hippy chick is a winner.

3720. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 22:53:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ggtbl01aua9rgomjaap6bp9mg1j0ljsv77@4ax.com>
Source record: 89041

On Sun, 26 Sep 2004 15:24:40 -0500, "John Smith"
<kd5yikes@mindspring.com> wrote:

>Has anyone tried making the coiled coax balun work at UHF? Specifically, on
>the 70 cm band.

Hi John,

Not when ferrites or resonant sections do the job too.

73's
Richard Clark, KB7QHC

3721. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 23:17:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gotbl0hbbc8agm399n7s449dl26qtaq7rn@4ax.com>
Source record: 89042
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On 26 Sep 2004 14:55:49 -0700, micropower_fm@hotmail.com (TheGnome)
wrote:

> I
>managed to get 75 feet of #26 magnet wire on a perpendicular roof to
>my window of my dorm room, and two runs of 15' speaker wire as a
>counterpoise in my room. I'm getting a really bad noise problem

Hi OM,

Use coax out 25-30 of those 75 feet. At the far end, put your
counterpoise there and thus move your input to a position remote from
that same noise (presumably in your room). At that same far end, add
a 1:1 BalUn or W2DU style otherwise known as a Current BalUn rather
than a Voltage BalUn (the distinction in this regard is important).
This will keep noise from coupling to the outside of your coax and
funneling into the feedpoint (as long as your receiver has good
shielding). It is called "choking." This will help with radiative,
local noise. You can add a second BalUn on the antenna/counterpoise
side for Z transformation, if you choose.

If the noise is conductive, then it is coming in through your power
supply (AC is carrying trash). Good ground can help solve this,
unless you are in a room on a high floor. You can confirm conductive
noise by breaking all AC and ground paths and running on battery power
(if this is an option) or connecting your antenna to a battery powered
receiver. Another option (if no battery options are available) is to
get a long extension cord and try another outlet that you can identify
as being on a separate breaker (this may not be easy in a dorm
situation). With this, you may find a quiet AC branch that is not
shared with the noise generators.

73's
Richard Clark, KB7QHC

3722. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-26 23:57:33 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <MHI5d.301695$Lj.294959@fed1read03>
Source record: 89043
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:gotbl0hbbc8agm399n7s449dl26qtaq7rn@4ax.com...
> On 26 Sep 2004 14:55:49 -0700, micropower_fm@hotmail.com (TheGnome)
> wrote:
>
> > I
> >managed to get 75 feet of #26 magnet wire on a perpendicular roof to
> >my window of my dorm room, and two runs of 15' speaker wire as a
> >counterpoise in my room. I'm getting a really bad noise problem
>
> Hi OM,
>
> Use coax out 25-30 of those 75 feet. At the far end, put your
> counterpoise there and thus move your input to a position remote from
> that same noise (presumably in your room). At that same far end, add
> a 1:1 BalUn or W2DU style otherwise known as a Current BalUn rather
> than a Voltage BalUn (the distinction in this regard is important).
> This will keep noise from coupling to the outside of your coax and
> funneling into the feedpoint (as long as your receiver has good
> shielding). It is called "choking." This will help with radiative,
> local noise. You can add a second BalUn on the antenna/counterpoise
> side for Z transformation, if you choose.
>
> If the noise is conductive, then it is coming in through your power
> supply (AC is carrying trash). Good ground can help solve this,
> unless you are in a room on a high floor. You can confirm conductive
> noise by breaking all AC and ground paths and running on battery power
> (if this is an option) or connecting your antenna to a battery powered
> receiver. Another option (if no battery options are available) is to
> get a long extension cord and try another outlet that you can identify
> as being on a separate breaker (this may not be easy in a dorm
> situation). With this, you may find a quiet AC branch that is not
> shared with the noise generators.
>
> 73's
> Richard Clark, KB7QHC

I agree with Richard.

The problem with outside antennas and noise often results from the
noise being carried common-mode on the outside of the cable
braid BACK to the antenna. Use a decoupling choke at the
antenna end of the coax. The 9:1 balun or transformer will
minimize losses due to high impedance swings at certain

frequencies--it won't do much for noise however.

Pete

3723. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 00:22:16 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <70J5d.14273$3n.5371@okepread06>
Source record: 89044

Roy Lewallen <w7el@eznec.com> wrote in message
news:10l69067vllv1bb@corp.supernews.com...
> Thanks for the responses. The suggestions were constructive, and they
> confirmed my observation that some people will do just about anything,
> including newsgroup posting, to avoid looking in the manual.
>
> Roy Lewallen, W7EL

Hi Roy,

Not meaning to insult, but judging from the
past, let me suggest that constructive
criticism seems to end up in your waste
basket. Here, it's obvious you'd rather
demean confused users, rather than admit
to a flaw in your program's conception.

One would assume you would have learned
something in regards to "intuitive" or "user
friendly" from the many negative comments
you've received in regards to the horribly
clunky interface of your DOS version.

Apparently, you either haven't the ability to
conceptualize an intuitive interface or you're
just too arrogant to listen to your customer's
suggestions... which is it?

Chuck, WA7RAI

3724. Re: Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 00:35:40 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj7n8v07b6@enews3.newsguy.com>
Source record: 89047

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:kbtbl0t2cfl2s6ja5bbvh2r13bdnasdge1@4ax.com...
> On Sun, 26 Sep 2004 15:08:39 -0500, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>
>>Hi, Gurus -
>>
>>Shown in "Antennas for All Applications" on page 820, figure 23-17 (a) is
>>a
>
> Hi John,
>
> Are you sure of the title? Author?
>
>
> 73's
> Richard Clark, KB7QHC

Yes, Richard. I am holding the book in my hands. It is the third edition by
John D. Krause and Ronald J. Marhefka.

73
John

3725. 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 00:35:56 UTC
From: bjmlittle00@aol.com
Message-ID: <20040926203556.02596.00001280@mb-m13.aol.com>
Source record: 89045

I am wanting to make an antenna that will work for 6 meters and 2 meters. Can someone provide a newbie with some suggestions???
Thanks
Buck

3726. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 00:38:02 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj7ndd07fe@enews3.newsguy.com>
Source record: 89046

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ggtbl01aua9rgomjaap6bp9mg1j0ljsv77@4ax.com...
> On Sun, 26 Sep 2004 15:24:40 -0500, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>
>>Has anyone tried making the coiled coax balun work at UHF? Specifically,
>>on
>>the 70 cm band.
>
> Hi John,
>
> Not when ferrites or resonant sections do the job too.
>
> 73's
> Richard Clark, KB7QHC

Hi, Richard -

Please give me more information about the ferrites...

How many do I need?
What permeability?
Who makes them capable of 450 MHz or so?

Thanks.

John

3727. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 02:02:44 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <8xK5d.1321$ls6.211@newsread3.news.atl.earthlink.net>
Source record: 89048

"John Smith" <kd5yikes@mindspring.com> wrote in message
news:cj78i80ki5@enews1.newsguy.com...
> Hi again!
>
> Has anyone tried making the coiled coax balun work at UHF? Specifically,
on
> the 70 cm band.
>
> In "Antennas for All Applications", they say the coil should be resonant
at
> the frequency of operation. The ARRL book(s) do not cover this band. Using
> RG58 and a GDO, I've learned that one cannot leave long leads on one's
coax
> coil as it will lower the resonant frequency drastically. Apparently, the
> long leads in conjunction with the coil forms an
antenna/inductor/capacitor
> combination.
>
> It appears to be difficult to obtain the required resonance repeatably.
Or,
> am I missing something (as usual)?
>
> The diameter seems to be somewhat critical. Does the diameter need to be
> much, much smaller than a quarter wave? What diamter would be a maximum?
>

By the time you get to UHF it is difficult to use coils. Baluns are usually
made of coax or some of the very small hard line like less than 1/4 inch in
diameter. The coax is just a fraction of a wavelength.

3728. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 02:02:45 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <9xK5d.1322$ls6.567@newsread3.news.atl.earthlink.net>
Source record: 89049

> I am wanting to make an antenna that will work for 6 meters and 2 meters.
Can
> someone provide a newbie with some suggestions???
> Thanks
> Buck

Try to be a little more specific. Do you want a beam, vertical, moble ?
Horizontal or vertical ? What do you plan to use the antenna for ?

3729. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 03:08:10 UTC
From: CW <"no adddress"@spam>
Message-ID: <esSdnRgSRPuEGcrcRVn-qw@comcast.com>
Source record: 89050
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

The only thing that will help is to get the antenna (and counterpoise) out
of the noise.
"TheGnome" <micropower_fm@hotmail.com> wrote in message
news:45cc755c.0409261355.67a5a37f@posting.google.com...
> Hey -
>
> I posted in here recently about active shortwave antennas - well, I
> managed to get 75 feet of #26 magnet wire on a perpendicular roof to
> my window of my dorm room, and two runs of 15' speaker wire as a
> counterpoise in my room. I'm getting a really bad noise problem,
> however - so bad that I can't hear stations on 20 meters! There's a
> pretty solid S9 noise floor that prevents me from hearing anything
> other than WWV and the major broadcast stations. Now, I know I can do
> better with the amount of wire I've got strung out there.
>
> I was thinking about adding one of those 9:1 transformers or other
> impedance matching things for longwires; would this reduce the noise
> problem I'm having? Any other tips for reducing longwire noise? It
> works enough, but I know I can do better...
>
>
> Thanks in advance.

3730. jo gunn 10/11meter ant. look at there web site

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 03:47:36 UTC
From: jcooper874@webtv.net
Message-ID: <681-41578D58-141@storefull-3273.bay.webtv.net>
Source record: 89051

www.jogunn.com they are to high for me what do yall think 73s

3731. Re: Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 04:49:14 UTC
From: Roger Halstead <Delete-Invallid.groups@tm.net>
Message-ID: <fp6fl0t01bv0jn9olvjm06odudr692t9aq@4ax.com>
Source record: 89052

On Fri, 24 Sep 2004 22:03:41 -0400, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

>Dear Neighbor:
> I use the AEA-CIA. It might be a bit large to take up a tower, but I
>have found it to be very useful.

I may give that a try. course you could stop by for coffee and bring
yours along<:-))

73

Roger (K8RI)
> 73 Mac N8TT

Roger Halstead (K8RI & ARRL life member)
(N833R, S# CD-2 Worlds oldest Debonair)
www.rogerhalstead.com

3732. Re: Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 04:49:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s1icl0tvm84eofi6nh0o47aolaa6927v8o@4ax.com>
Source record: 89053

>Yes, Richard. I am holding the book in my hands. It is the third edition by
>John D. Krause and Ronald J. Marhefka.

Kraus. John Krause writes about Opera.

Hi John,

The sub-title threw me. Don't have that one. I will await your scan
of that page.

73's
Richard Clark, KB7QHC

3733. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 05:06:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qeicl010574sco5j4tse8uqfc40bpa1lhu@4ax.com>
Source record: 89054

On Sun, 26 Sep 2004 19:38:02 -0500, "John Smith"
<kd5yikes@mindspring.com> wrote:
>Please give me more information about the ferrites...

Hi John,

Visit:
http://bytemark.com/products/content2.htm
You will find background information here, but unfortunately they
don't maintain the pages very well and some information is lacking.

>How many do I need?

Depends on application. You want at least 3 times the expected load
Z. Ferrite Z is bulk determined and the usual standard of bulk size
is defined as a type 101 size bead.

>What permeability?

Type 43 or 64 material. 64 being slightly better (by about 15%).

>Who makes them capable of 450 MHz or so?

Amidon, but this is not proprietary (although the type specification
may be). There are other manufacturers like Fairite.

73's
Richard Clark, KB7QHC

3734. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 05:47:53 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040927014753.07384.00001743@mb-m29.aol.com>
Source record: 89055

As a preacher, a "born-again zealot" as you would call it, please keep your personal opinions to yourself. This news group is about antennas, not anti-religion rants.

Randy Ka4nma

3735. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 06:30:18 UTC
From: Wes Stewart <n7ws_@_yahoo.com>
Message-ID: <j7cfl0hemh3tsie0f2ce55q9tmttbb3qpc@4ax.com>
Source record: 89056

On Sun, 26 Sep 2004 17:22:16 -0700, "Chuck" <wa7rai@raibeam.com>
wrote:

|
|Roy Lewallen <w7el@eznec.com> wrote in message
|news:10l69067vllv1bb@corp.supernews.com...
|> Thanks for the responses. The suggestions were constructive, and they
|> confirmed my observation that some people will do just about anything,
|> including newsgroup posting, to avoid looking in the manual.
|>
|> Roy Lewallen, W7EL
|
|Hi Roy,
|
|Not meaning to insult, but judging from the
|past, let me suggest that constructive
|criticism seems to end up in your waste
|basket. Here, it's obvious you'd rather
|demean confused users, rather than admit
|to a flaw in your program's conception.
|
|One would assume you would have learned
|something in regards to "intuitive" or "user
|friendly" from the many negative comments
|you've received in regards to the horribly
|clunky interface of your DOS version.
|
|Apparently, you either haven't the ability to
|conceptualize an intuitive interface or you're
|just too arrogant to listen to your customer's
|suggestions... which is it?

You must be talking about another Roy.

I have on several occasions contacted Roy and pointed out minor bugs
and every time I have been thanked for reporting the problem. Usually
a patch was forthcoming to me via email within a day if not sooner. A
public patch could be found on his web site shortly after.

I have to contrast this to a popular logging program that I use where
I have had similar difficulties and posted my comments on their
reflector. Once, the program developer had the nerve to call me on my
unlisted number and ask me to refrain from making such comments
because I was costing them sales. During that conversation I used Roy
as an example of how a software company *should* support its

customers.

They also have the MO of "saving up" bug fixes and selling me an annual "improved" program, something that I haven't had to do with EZNEC.

3736. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 06:44:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10lfdm71jd0hi37@corp.supernews.com>
Source record: 89057

Richard Clark wrote:
> . . .

>>Who makes them capable of 450 MHz or so?
>
>
> Amidon, but this is not proprietary (although the type specification
> may be). There are other manufacturers like Fairite.
>

I don't believe that Amidon manufactures cores (except, apparently, custom ones through one if its subsidiaries), but only resells them. The last I checked, most of their ferrite cores are from Fair-Rite. The common numerical ferrite type designations of 43, 72, and so forth are Fair-Rite's.

They also sell powdered iron cores from Micrometals.

Roy Lewallen

3737. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 06:55:25 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <mpdfl0h28m9m6t0pl9o6n1hicd3dajvlei@4ax.com>
Source record: 89058

En Roy Lewallen va escriure en Thu, 23 Sep 2004 12:29:06 -0700:

>Thanks for the responses. The suggestions were constructive, and they
>confirmed my observation that some people will do just about anything,
>including newsgroup posting, to avoid looking in the manual.
>
>Roy Lewallen, W7EL

Hi Roy,

It is true that your program's user interface is not the best in
the world, but... Who cares? I think the free version of EZNEC
has made a lot for the ham community, much more than some of the
people criticizing you.

Best regards,

--
Toni

"Auto" = prefijo griego que significa "no funciona"

3738. Re: 88 ft. Doublet Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 10:16:13 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <NLednecTTfXxdcrcRVn-qQ@gwi.net>
Source record: 89059

Bert Craig wrote:
> Does an 88 ft. doublet have any advantage over a conventional 67 ft.
> doublet? In either case, feedline would be approx. 50 ft. of 450 Ohm ladder
> line to a 4:1 current balun, then a short length of coax into the shack.
>
> My usual band of choice is 40, but I'd like to become more active on 20 and
> 30.
>

Hi Burt,

W4RNl , Cebik gives a good write up on this and some Ideas on other
antennas as will (you'll need a PDF reader though) You can find his
article at
http://www.cebik.com/fdim/fdim9.pdf

Hope this is of some help.
73 Dave KC1DI

3739. Re: Radio astronomers build huge antenna farm 350km across in Netherlands

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 10:41:48 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <L7S5d.81187$9Y5.15972@fed1read02>
Source record: 89060

"Fractenna" <fractenna@aol.com> wrote in message
news:20040926121828.01009.00001578@mb-m06.aol.com...
> >I regularly use an active 41" monopole to accurately measure electric
> >field
>>strength over the range of 10 kHz to 30 MHz. That's a ratio of 3000:1, and
>>that is 25-year old technology.
>>
>>--
>>Ed
>>WB6WSN
>>
>
>
>
> And your variation of gain, excluding mismatch, is...?
>
> 73,
> Chip N1IR
>
>

Maybe I gave you a trick answer, because the antenna I cited is a
receive-only device. It is concerned only with measuring the strength of the
electric field, and derives no phase information. I'm sure its efficiency is
horrible, but its bandwidth is huge and its gain is about +/- 0.5 dB.

FYI, here's an example of this style of antenna:
http://www.ets-lindgren.com/productpage.cfm?model=3301B&producttype=Antennas

Even if it did not face into an active pre-amplifier, it would still be a
poor emitter anywhere below a few MHz. Electrically short is something that
hasn't been finessed yet.

Ed
wb6wsn

3740. Re: non-inductive resistors: metal-film vs carbon ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 11:34:37 UTC
From: n1jpr@hotmail.com
Message-ID: <95a201e0.0409270334.54db7534@posting.google.com>
Source record: 89061

It was easy!

I just slammed a couple of 100 ohm 2W carbon film resistors in parallel on the output SO239 of a SWR meter, and powered it from a CB transceiver. Center contact by plugging crumpled, twisted leads into hole. Grounding with help of a tiewrap. Extremely low SWR. The 2x 2-watt resistors became quite hot at 3W RF carrier after 10 min. keydown (well... let's sat 3 min. "mike-PTT-kept-pressed-by-rubberband").

I made the T2FD 400 ohm resistor as 4 "squares" of 4 x 100 ohm resistors, soldered as a series of diamonds. Painted in high temperature engine black paint. Will go inside a generous ABS project box, weather sealed but with weephole. Will hang asymetrically, to point weephole down. Ball of crumpled alu foil should help keep bugs out, yet allow dripping.

Nominally, that would be 16x2=32W. Derated to 1/3 (say, 10W) should be still OK with up to 30W RF out @ 100% duty cycle, down to the minimum frequency.

It probably could take more at low duty cycle or higher frequencies, but I won't put in anything more, as the balun I made includes 60V neons between feedpoints and ground, to provide paranoid clipping of pulses from nearby lightning strikes.

If matching is fair, they'd clip at about 70W, as impedance referred to ground is 50 ohm. OK for QRP or for typical surplus 20W manpack operation.

3741. Re: 88 ft. Doublet Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 12:37:54 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <CQT5d.4581$NS1.2069613@news4.srv.hcvlny.cv.net>
Source record: 89062

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:hnsdl01c3bma8m6buroob4he8ft0dp73h8@4ax.com...
> On Sun, 26 Sep 2004 13:22:15 GMT, "Bert Craig"
> <wa2si@optonline.netNOSPAM> wrote:
>
>>Does an 88 ft. doublet have any advantage over a conventional 67 ft.
>>doublet? In either case, feedline would be approx. 50 ft. of 450 Ohm
>>ladder
>>line to a 4:1 current balun, then a short length of coax into the shack.
>>
>>My usual band of choice is 40, but I'd like to become more active on 20
>>and
>>30.
>
> Hi Bert,
>
> Short answer: No. [could be Yes]
>
> Long answer: Yes. [could be No]
>
> More details are needed to lengthen the short answer or shorten the
> long answer. Are you pointed in the right direction? A longer
> antenna can invalidate that. Can you load the antenna? A longer
> antenna can invalidate that. Going to higher bands makes these
> questions even more meaningful.
>
> Advice: Leave it alone, or put it up higher.
>
> 73's
> Richard Clark, KB7QHC

Advice taken, thanks Richard. :-)

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3742. Re: 88 ft. Doublet Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 12:37:55 UTC
From: Bert Craig <wa2si@optonline.netNOSPAM>
Message-ID: <DQT5d.4582$NS1.2070584@news4.srv.hcvlny.cv.net>
Source record: 89063

"KC1DI" <elbc2@gwi.net> wrote in message
news:NLednecTTfXxdcrcRVn-qQ@gwi.net...
> Bert Craig wrote:
>> Does an 88 ft. doublet have any advantage over a conventional 67 ft.
>> doublet? In either case, feedline would be approx. 50 ft. of 450 Ohm
>> ladder line to a 4:1 current balun, then a short length of coax into the
>> shack.
>>
>> My usual band of choice is 40, but I'd like to become more active on 20
>> and 30.
>>
>
> Hi Burt,
>
> W4RNl , Cebik gives a good write up on this and some Ideas on other
> antennas as will (you'll need a PDF reader though) You can find his
> article at
> http://www.cebik.com/fdim/fdim9.pdf
>
> Hope this is of some help.
> 73 Dave KC1DI

Sure is, DAve. I now have the page saved offline, thanks so much. :-)

--
Vy 73 de Bert
WA2SI
FISTS #9384
QRP ARCI #11782

3743. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 13:56:13 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <10lg71467m85ne8@corp.supernews.com>
Source record: 89064

"JohnN3TWN" <johnn3twn@aol.comnospam> wrote in message
news:20040926185130.03437.00000697@mb-m27.aol.com...
> >Please allow me to apologize in advance, but I can't resist asking:
> >
> > "If a dipole falls in a forest and there's no one there to hear it,
> >does it make a sound?"
> >
>
> Yes, the sound of its owner swearing up a blue storm at having to get the
*&%$
> thing back up over "just the right tree branches"....
>
> Been using a "random" dipole (actually configured in an inverted vee with
50
> foot legs) made from insulated house wire, fed with 450 ohm line, hooked
to a
> little MFJ tuner. QTH is DEEP in the woods and the antenna is VERY close
to
> trees and actually passes within inches of many leaves/branches. Work
mostly
> 40 CW but every so often will wander around from 80 to 10 CW and SSB.
Sure,
> I'll never have a "big gun" signal with this antenna, but it works, its
cheap
> and easy, and I can always find someone to chat with. Once and a while, I
even
> manage to snag some pretty fair DX.
>
> The only thing I try to avoid is letting the antenna actually touch any
thing.
>
> Good luck and good DX
>
> de N3TWN John

John
After re-reading your post I must agree.
Wire antennas are cheap and easy.
Significant improvements over wire antennas are expensive and difficult.
73 H., NQ5H

3744. Re: Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 14:10:59 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj971m02lvq@enews1.newsguy.com>
Source record: 89065

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:s1icl0tvm84eofi6nh0o47aolaa6927v8o@4ax.com...
> >Yes, Richard. I am holding the book in my hands. It is the third edition
> >by
>>John D. Krause and Ronald J. Marhefka.
>
> Kraus. John Krause writes about Opera.

Yes, of course. It's embarassing to misspell a noted author's name. My
apologies.

> The sub-title threw me. Don't have that one. I will await your scan
> of that page.
>
> 73's
> Richard Clark, KB7QHC

I may be able to get it posted late today. I will put it on a.b.s.e., if
that's acceptable.

John

3745. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 14:23:44 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj97pl02mkd@enews1.newsguy.com>
Source record: 89066

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:8xK5d.1321$ls6.211@newsread3.news.atl.earthlink.net...
>
> "John Smith" <kd5yikes@mindspring.com> wrote in message
> news:cj78i80ki5@enews1.newsguy.com...

> By the time you get to UHF it is difficult to use coils. Baluns are
> usually
> made of coax or some of the very small hard line like less than 1/4 inch
> in
> diameter. The coax is just a fraction of a wavelength.

Hi, Ralph -

Yes, I can see that now. A little over two turns of RG58, tightly wound, on a .75 inch diameter is about right to be resonant around 440 MHz. However, the resonant frequency moves with compression and expansion of the coil (not unexpectedly) making it difficult to settle on the dimensions.

The problem here is that I must have no leads on the coil while experimenting because the leads affect the frequency. Later, when I create the coil at the base of the antenna, I will not be able to determine the coil's exact resonant frequency and adjust it for my frequency of operation.

I think I'll give up on this idea.

Thanks for your comments.

John

3746. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 14:36:21 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj98h802n9u@enews1.newsguy.com>
Source record: 89068

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:qeicl010574sco5j4tse8uqfc40bpa1lhu@4ax.com...
> On Sun, 26 Sep 2004 19:38:02 -0500, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>>Please give me more information about the ferrites...
>
> Hi John,
>
> Visit:
> http://bytemark.com/products/content2.htm
> You will find background information here, but unfortunately they
> don't maintain the pages very well and some information is lacking.
>
>>How many do I need?
>
> Depends on application. You want at least 3 times the expected load
> Z. Ferrite Z is bulk determined and the usual standard of bulk size
> is defined as a type 101 size bead.

Thanks for the info, Richard.

Is there a way to add toroids to RG58 and measure the resulting
effectiveness? Maybe measure the RF on the shield with an RF Voltmeter?

John

3747. Re: Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 15:02:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5amdl0htfne06ffdbdhp9g345vo9q0fqr0@4ax.com>
Source record: 89067

On Mon, 27 Sep 2004 09:10:59 -0500, "John Smith"
<kd5yikes@mindspring.com> wrote:

>I may be able to get it posted late today. I will put it on a.b.s.e., if
>that's acceptable.

Hi John,

I am unfamiliar with the acronym. Do you have a website?

73's
Richard Clark, KB7QHC

3748. NEED INFOS TO MAKE A WINDOM ANTENNA (FD4)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 15:18:31 UTC
From: f4atm@wanadoo.fr
Message-ID: <63ebcb67.0409270718.69d88541@posting.google.com>
Source record: 89069

Hello,
i need all lenghts of wires and balun type (1/6 or 1/4)to make a
Windom antenna 10m to 80m.
My maximal lenght for the 2/3 wire is 24m maxi, i have no mutch place
in my little garden ...
Please send me schematics or infos by mail to f4atm@wanadoo.fr
Thanks in advance for reply.
73
F4ATM Laurent

3749. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 15:59:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qqmdl01kvqebgl30ro3g4o4asm7p7fbdp4@4ax.com>
Source record: 89070

On Mon, 27 Sep 2004 09:36:21 -0500, "John Smith"
<kd5yikes@mindspring.com> wrote:

>Is there a way to add toroids to RG58 and measure the resulting
>effectiveness? Maybe measure the RF on the shield with an RF Voltmeter?

Hi John,

Apply a steady, known power to a resistor (25 - 75 Ohms) and measure the voltage (more for sanity's sake). Add one core to the lead (make leads as short as possible, but long enough to allow ONE core to be added. Measure the drop across BOTH the resistor AND the core. Measure the drop across EACH, the resistor and the core. Across the core means at the wire passing through the center, as if the core were a leaded component with leads emerging from either side (it will NOT act like a short! - ain't science wunnerful?). Standard ratiometrics will reveal the core's Z.

You need only measure one core at a time, the addition of cores is additive just like series resistors. Unlike chained resistors, successive passes of the same wire through the core raises the Z by the square of the turns. A "turn" is defined as each passage of a conductor through the center (do not confuse with loops which may give rise to the appearance of a "turn" that in fact does not have a lead through the center; or that you lose a turn by counting only loops).

73's
Richard Clark, KB7QHC

3750. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 16:11:16 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj9e37013et@enews2.newsguy.com>
Source record: 88972

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:qqmdl01kvqebgl30ro3g4o4asm7p7fbdp4@4ax.com...
> On Mon, 27 Sep 2004 09:36:21 -0500, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>
>>Is there a way to add toroids to RG58 and measure the resulting
>>effectiveness? Maybe measure the RF on the shield with an RF Voltmeter?
>
> Hi John,
>
> Apply a steady, known power to a resistor (25 - 75 Ohms) and measure
> the voltage (more for sanity's sake). Add one core to the lead (make
> leads as short as possible, but long enough to allow ONE core to be
> added. Measure the drop across BOTH the resistor AND the core.
> Measure the drop across EACH, the resistor and the core. Across the
> core means at the wire passing through the center, as if the core were
> a leaded component with leads emerging from either side (it will NOT
> act like a short! - ain't science wunnerful?). Standard ratiometrics
> will reveal the core's Z.
>
> You need only measure one core at a time, the addition of cores is
> additive just like series resistors. Unlike chained resistors,
> successive passes of the same wire through the core raises the Z by
> the square of the turns. A "turn" is defined as each passage of a
> conductor through the center (do not confuse with loops which may give
> rise to the appearance of a "turn" that in fact does not have a lead
> through the center; or that you lose a turn by counting only loops).
>
> 73's
> Richard Clark, KB7QHC

Thanks, Richard. I'll give this a shot. Might not get to it until the
weekend, though.

73,
John

3751. Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could I Make a1/2 Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 16:12:47 UTC
From: WolfMan <WMan@W2GLI.com>
Message-ID: <3_W5d.5585$NS1.2618920@news4.srv.hcvlny.cv.net>
Source record: 88971

I'm Limited To An Antenna On The Front Of My House. Out My Window I Made A Simple !/4 wave Verticle Dipole. Would A 1/2 Wave Simply Be Twice The Length, Using 462/f Mhz, And Would There Be An Advantage With A 1/2 Wave Over a 1/4 Wave ?
Thanks

3752. Re: Natural balun/Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 16:18:43 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj9eh6013r7@enews2.newsguy.com>
Source record: 88973

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:5amdl0htfne06ffdbdhp9g345vo9q0fqr0@4ax.com...
> On Mon, 27 Sep 2004 09:10:59 -0500, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>
>>I may be able to get it posted late today. I will put it on a.b.s.e., if
>>that's acceptable.
>
> Hi John,
>
> I am unfamiliar with the acronym. Do you have a website?
>
> 73's
> Richard Clark, KB7QHC

The acronym is for the news group alt.binaries.schematics.electronics. But,
I can make it available from a Web site, no problem.

Thanks,
John

3753. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 16:43:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k4sdl0terui96ljs1cq2v6kue62kltc36o@4ax.com>
Source record: 88974

On Mon, 27 Sep 2004 11:11:16 -0500, "John Smith"
<kd5yikes@mindspring.com> wrote:

>Thanks, Richard. I'll give this a shot. Might not get to it until the
>weekend, though.

Hi John,

Good. Let us know of your results whenever you finish. This feed
back encourages others who might not be participating in this thread,
but who are interested nonetheless.

73's
Richard Clark, KB7QHC

3754. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 16:54:25 UTC
From: k7itm@aol.com
Message-ID: <3200347.0409270854.28120a9a@posting.google.com>
Source record: 88975

I've made coiled-coax choke baluns at 440MHz. Seems to work fine.
Generally expect to use pretty small line, to be able to make a small
enough coil. The self-resonance is nice but not critical. You're
just looking for a moderately high impedance. I have a program that
does a good job of estimating the self-resonant frequencies of coils,
but it's not on this machine so I can't check for you...I think one of
Reg Edward's programs also estimates self resonance for coils. If you
can get an impedance that's a few times the load impedance, you should
be OK. In feeding an antenna, it may be as important to use a couple
such chokes, spaced about a quarter wave apart, to keep the antenna
from coupling strongly to a possibly resonant section of feedline.

Cheers,
Tom

"John Smith" <kd5yikes@mindspring.com> wrote in message
news:<cj78i80ki5@enews1.newsguy.com>...
> Hi again!
>
> Has anyone tried making the coiled coax balun work at UHF? Specifically, on
> the 70 cm band.
>
> In "Antennas for All Applications", they say the coil should be resonant at
> the frequency of operation. The ARRL book(s) do not cover this band. Using
> RG58 and a GDO, I've learned that one cannot leave long leads on one's coax
> coil as it will lower the resonant frequency drastically. Apparently, the
> long leads in conjunction with the coil forms an antenna/inductor/capacitor
> combination.
>
> It appears to be difficult to obtain the required resonance repeatably. Or,
> am I missing something (as usual)?
>
> The diameter seems to be somewhat critical. Does the diameter need to be
> much, much smaller than a quarter wave? What diamter would be a maximum?
>
> Thanks for any help.
>
> John (KD5YI)

3755. Re: My apologies to the group!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 17:02:43 UTC
From: KC8QJP <KC8QJP@crisco.net>
Message-ID: <2rqvgeF1dt4pnU1@uni-berlin.de>
Source record: 88976
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.cb,rec.radio.amateur.policy,rec.radio.amateur.equipment,rec.radio.amateur.antenna

I am hot to trott and I got
the guetto booty jus for you. I used to be a car parking lot attendant
but I got caught cheating. Damn it, when I signed up for this gig I
was told I was going to make a lot of money . Damn lying schools. Piss
on em. I got my own ways of makin da cash......Dougay is my main man,
but he is smallish so I need da big johnso to make me feel betta about
myself
"WA8ULX" <wa8ulx@aol.com> wrote in message
news:20040905115456.23728.00000125@mb-m12.aol.com...
> >Now if you would just leave ham radio, you would make your biggest ever
>>contribution to the betterment of the hobby. Congratulations and thanks
>>in
>>advance.
>>
>>WB4JNX
>
> It will never happen,Ham Radio needs people like me to keep the, Knuckle
> Draggin, Sissy girl, CBplussers in line.

3756. Outbacker on a tripod - will this work ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 17:06:32 UTC
From: Peter Taucher <hamnews@abwesend.de>
Message-ID: <cj9hap$99d$01$1@news.t-online.com>
Source record: 88977

Hi,

I am running an 817 and I'd like to go out portabel with this rig.

I am planning to buy an Outbacker on a tripod, using a handmade metal mount with the possibility to attach a counterpoise.

Will the Outbacker work in this setup? Or does it need a lot of metal like cars habe?

I would use a counterpoise of course.

Any hints or suggestions?

vy 73
Peter

3757. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 17:22:57 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <cj9i9j028eg@enews3.newsguy.com>
Source record: 88979

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0409270854.28120a9a@posting.google.com...
> I've made coiled-coax choke baluns at 440MHz. Seems to work fine.
> Generally expect to use pretty small line, to be able to make a small
> enough coil. The self-resonance is nice but not critical. You're
> just looking for a moderately high impedance. I have a program that
> does a good job of estimating the self-resonant frequencies of coils,
> but it's not on this machine so I can't check for you...I think one of
> Reg Edward's programs also estimates self resonance for coils. If you
> can get an impedance that's a few times the load impedance, you should
> be OK. In feeding an antenna, it may be as important to use a couple
> such chokes, spaced about a quarter wave apart, to keep the antenna
> from coupling strongly to a possibly resonant section of feedline.
>
> Cheers,
> Tom

Thanks for that info, Tom.

If resonance is not necessary, then I need only one turn of .75 diameter to make sure resonance is higher than my operating frequency. That would make the coil with parasitic capacitance look inductive.

73,
John

3758. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could I Make a1/2 Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 17:34:09 UTC
From: Micro MegaWatt <MMW@power.net>
Message-ID: <laY5d.35660$aW5.25779@fed1read07>
Source record: 88978

A quarter wave vertical needs quarter wave radials at 90 degrees to the vertical.

A half wave vertical does not need radials as it is complete but needs fed at the center with the coax running out 90 degrees to the dipole (as far as possible)

For formulas see URL:
http://www.geocities.com/Augusta/7117/antenna.html

--
One Watt

To steal ideas from one person is plagiarism;
to steal from many is research.
-- Comedian Steven Wright

"WolfMan" <WMan@W2GLI.com> wrote in message
news:3_W5d.5585$NS1.2618920@news4.srv.hcvlny.cv.net...
> I'm Limited To An Antenna On The Front Of My House. Out My Window I Made A Simple !/4 wave Verticle Dipole. Would A 1/2 Wave Simply Be Twice The Length, Using 462/f Mhz, And Would There Be An Advantage With A 1/2 Wave Over a 1/4 Wave ?
> Thanks

3759. Re: Outbacker on a tripod - will this work ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 18:24:58 UTC
From: dplatt@radagast.org
Message-ID: <10lgmnqmilho06a@corp.supernews.com>
Source record: 88980

>I am running an 817 and I'd like to go out portabel with this rig.
>
>I am planning to buy an Outbacker on a tripod, using a handmade metal
>mount with the possibility to attach a counterpoise.
>
>Will the Outbacker work in this setup? Or does it need a lot of metal
>like cars habe?
>
>I would use a counterpoise of course.
>
>Any hints or suggestions?

An Outbacker can probably be made to work in this way, but I don't think it will work _well_. One of the local ham-clubs I belong to recently had a presentation from a guy who has been trying to work portable with a rather similar setup (a multiband mobile vertical, on a tripod, with counterpoise wires, and an FT817) - he sums up his results as "I can hear them OK, but nobody can hear me."

An Outbacker's efficiency is only a few percent - there are a lot of losses inherent in its design. Some people have referred to antennas of this type as a "tuned, lossy counterpoise, connected to a large untuned radiator known as a `car body'".

Since you're going to be running only a few watts of power, I think the Outbacker's rather low radiation efficiency is going to be rather frustrating for you. An Outbacker mounted up high on a Ford Aerostar, and fed with 50 watts PEP, gives me "Good mobile signal" reports from across the Western U.S. on 40 meters... but fed with a few watts from an FT817, with only a minimal counterpoise located fairly close to the earth's surface, and I think you may have trouble being heard well.

For less weight and far less cost than an Outbacker plus tripod plus counterpoise, you could carry a "yo-yo" adjustable-length wire dipole plus coaxial feedline plus a Norcal BLT or similar lightweight tuner. String this up from a couple of convenient trees, and you'll get an order of magnitude more signal out - probably 1-2 S-units more.

For other options, see http://www.amqrp.org/projects/projects.html - take a look at the "Crappie Antenna" and the "St. Louis Vertical" - two interesting ways of using a very-lightweight collapsing fishing pole as an antenna support.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior

I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3760. DIY Omni TV receiver antenna challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 19:58:05 UTC
From: angelo@oceansystems.com
Message-ID: <864d4e6b.0409271158.5b059f6b@posting.google.com>
Source record: 88981

I wish to hoist an antenna up a sailboat mast on a halyard to help receive TV stations when out in the Chesapeake Bay. The challenge is that the boat will rotate at anchor with the wind and even turn the antanna on it's axis as it it "hoisted" by rope and not locked rotationally.

There are commercially available antennas .. but it looks to me that it's simply a "fat" folded dipole. I would think that I could construct it's equivalent using the basic homemade folded dipole approach.

<http://www.boatenna.com/framesample1_000002.htm>

Any other suggestions for a do-it-yourself antenna? It's not often that I want to watch TV when on the boat (i.e. the reason I'm out there) so I was hoping to build something myself out of thick guage wire and 300ohm antenna wire.

Would 2 stacked folded dipoles with a 90deg offset (and "X") be an effective approach?

If I just do the loop, what would you recommend the diameter be for mid-range VHF5-13 or so?

Thanks in advance
Angelo

3761. Re: DIY Omni TV receiver antenna challenge

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 20:08:24 UTC
From: dplatt@radagast.org
Message-ID: <10lgspocg5enq18@corp.supernews.com>
Source record: 88982

In article <864d4e6b.0409271158.5b059f6b@posting.google.com>,
Angelo Guarino <angelo@oceansystems.com> wrote:

>I wish to hoist an antenna up a sailboat mast on a halyard to help
>receive TV stations when out in the Chesapeake Bay. The challenge is
>that the boat will rotate at anchor with the wind and even turn the
>antanna on it's axis as it it "hoisted" by rope and not locked
>rotationally.
>
>There are commercially available antennas .. but it looks to me that
>it's simply a "fat" folded dipole. I would think that I could
>construct it's equivalent using the basic homemade folded dipole
>approach.
>
><http://www.boatenna.com/framesample1_000002.htm>
>
>Any other suggestions for a do-it-yourself antenna? It's not often
>that I want to watch TV when on the boat (i.e. the reason I'm out
>there) so I was hoping to build something myself out of thick guage
>wire and 300ohm antenna wire.
>
>Would 2 stacked folded dipoles with a 90deg offset (and "X") be an
>effective approach?

That would work - it's a "turnstile" configuration.

Another fairly common approach is to build a 300-ohm folded dipole,
and then bend the dipole into an "S" shape. This gives it a fairly
omnidirectional pattern, eliminating the null-off-the-end of a
straight dipole. You could probably build one of these out of
heavy-gauge copper or aluminum wire.

--
Dave Platt <dplatt@radagast.org> AE6EO
Hosting the Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

3762. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could I Make a1/2 Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 20:45:10 UTC
From: Steve Nosko <suteuve.nosukowicuz@moutouroula.com>
Message-ID: <cj9u9i$18i$1@newshost.mot.com>
Source record: 88986

You need a full half wave to be a real "dipole". one quarter wave on each side of center. I can't imagine what you have now.

--
Steve N, K,9;d, c. i My email has no u's.

"WolfMan" <WMan@W2GLI.com> wrote in message news:3_W5d.5585$NS1.2618920@news4.srv.hcvlny.cv.net...
> I'm Limited To An Antenna On The Front Of My House. Out My Window I Made A Simple !/4 wave Verticle Dipole. Would A 1/2 Wave Simply Be Twice The Length, Using 462/f Mhz, And Would There Be An Advantage With A 1/2 Wave Over a 1/4 Wave ?
> Thanks

3763. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 20:49:57 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <9X_5d.14724$3n.6887@okepread06>
Source record: 88983

Theplanters95 <theplanters95@aol.comnospam> wrote in message
news:20040927014753.07384.00001743@mb-m29.aol.com...
> As a preacher, a "born-again zealot" as you would call it, please keep your
> personal opinions to yourself. This news group is about antennas, not
> anti-religion rants.
>
> Randy Ka4nma

Hi Randy,

Religious fanaticism is anti liberty, and liberty
is the foundation of American values. To speak
out against this lunacy does not make one anti
religious, just anti fanatic... anti zealot - a
distinction that seems to have evaded you.

The Islamic Jihadist's and terrorists are religious
zealots (fanatics) that hate liberty loving folks
(liberals) every bit as much as you do. Zealots
are zealots, regardless of clothes they wear or
the deity they worship.

Jesus' sermon on the mound, was certainly NOT
about fanaticism... or political power, deception,
and spreading lies about opponents... just the
opposite, in fact!

That said, you should have noticed the topic
of my post was about political ramifications in
regards to ham radio. It was not anti-religious.

Chuck, WA7RAI

3764. Re: 88 ft. Doublet Question

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 20:55:33 UTC
From: N2EY@AOL.COM
Message-ID: <c2356669.0409271255.66475088@posting.google.com>
Source record: 88984

"Bert Craig" <wa2si@optonline.netNOSPAM> wrote in message
news:<boz5d.22893$6X1.16042204@news4.srv.hcvlny.cv.net>...
> Does an 88 ft. doublet have any advantage over a conventional 67 ft.
> doublet?

It depends! One big consideration is "on which band"?

On 80 meters, the 88 footer will do a better job than the 67 footer
because the feedpoint Z is higher and less reactive. If you can get to
132 feet, things get really good on 80 - but that's a lot of space to
find.

The 88 footer will theoretically have some gain broadside to the wire
on 40 through 20 meters because it's longer than a half wave but
shorter than a 1.28 wave (think of two 5/8 wave verticals back to
back..) Above 20 you theoretically get a cloverleaf pattern.

W4RNL explains it better than I can but you already know that...

> In either case, feedline would be approx. 50 ft. of 450 Ohm ladder
> line to a 4:1 current balun, then a short length of coax into the shack.

That's the rub - feeding the beast.

Model the thing with Reg Edwards' DIPOLE3 freeware and see what you
can expect on the various bands.

> My usual band of choice is 40, but I'd like to become more active on 20 and
> 30.

If you can get the feed figured out, it might be worth doing. Be aware
that the gain isn't more than a few dB, and an inefficient feed system
can eat a lot of it up.

Ideally, you'd eliminate the balun and run straight to a balanced
tuner. All depends on your house/shack situation. Some family members
take a dim view of new holes in new walls - can't understand why...

73 de Jim, N2EY

3765. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 21:18:45 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <Vs%5d.11498$gG4.7553@newsread1.news.pas.earthlink.net>
Source record: 88985

"John Smith" <kd5yikes@mindspring.com> wrote in message
news:cj77k70jjo@enews1.newsguy.com...
> Hi, Gurus -
>
> Shown in "Antennas for All Applications" on page 820, figure 23-17 (a) is
> a folded dipole which looks as if it could be easily constructed from
> RG58. This antenna would be appealing because of the natural balun.
> However, they make no mention of the required coax velocity factor nor of
> the terminal impedance. I tried constructing one and measuring with a
> vector voltmeter but the data were inconclusive. That is, I don't think I
> know how to make measurements like this at 440 MHz yet. It is much
> trickier than I thought.
>
> In any case, can someone tell me:
>
> - Can RG58 be used, or will the velocity factor mess up the antenna?
> - What will be the terminal impedance?
> - Will the terminal impedance change as the gap between the elements vary?
>
> (I consider the "terminal" at the midpoint of the bottom element)
>
> Thanks.
>
> John (KD5YI)

The picture of this antenna can be found at

http://www.sophisticatedsolutions.us/images/Folded%20Dipole.jpg

(assuming I did everything right).

3766. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 21:37:29 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <YI%5d.14728$3n.11738@okepread06>
Source record: 88987

Wes Stewart <n7ws_@_yahoo.com> wrote in message
news:j7cfl0hemh3tsie0f2ce55q9tmttbb3qpc@4ax.com...
> On Sun, 26 Sep 2004 17:22:16 -0700, "Chuck" <wa7rai@raibeam.com>
> wrote:
>
> |
> |Roy Lewallen <w7el@eznec.com> wrote in message
> |news:10l69067vllv1bb@corp.supernews.com...
> |> Thanks for the responses. The suggestions were constructive, and they
> |> confirmed my observation that some people will do just about anything,
> |> including newsgroup posting, to avoid looking in the manual.
> |>
> |> Roy Lewallen, W7EL
> |
> |Hi Roy,
> |
> |Not meaning to insult, but judging from the
> |past, let me suggest that constructive
> |criticism seems to end up in your waste
> |basket. Here, it's obvious you'd rather
> |demean confused users, rather than admit
> |to a flaw in your program's conception.
> |
> |One would assume you would have learned
> |something in regards to "intuitive" or "user
> |friendly" from the many negative comments
> |you've received in regards to the horribly
> |clunky interface of your DOS version.
> |
> |Apparently, you either haven't the ability to
> |conceptualize an intuitive interface or you're
> |just too arrogant to listen to your customer's
> |suggestions... which is it?
>
> You must be talking about another Roy.
>
> I have on several occasions contacted Roy and pointed out minor bugs
> and every time I have been thanked for reporting the problem. Usually
> a patch was forthcoming to me via email within a day if not sooner. A
> public patch could be found on his web site shortly after.
>
> I have to contrast this to a popular logging program that I use where
> I have had similar difficulties and posted my comments on their
> reflector. Once, the program developer had the nerve to call me on my

> unlisted number and ask me to refrain from making such comments
> because I was costing them sales. During that conversation I used Roy
> as an example of how a software company *should* support its
> customers.
>
> They also have the MO of "saving up" bug fixes and selling me an
> annual "improved" program, something that I haven't had to do with
> EZNEC.
>

Hi Wes,

There is no doubt, Roy is an excellent
engineer, but as an interface programmer,
IMO, the opposite is true. Apparently, my
experience has not been the same as
yours, but in any case, there is no excuse
for inconsistency... or demeaning those
who request help on NGs as a result.

Chuck, WA7RAI

3767. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 21:41:59 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <ZI%5d.14729$3n.11120@okepread06>
Source record: 88988

Toni <post_to_usenet@hotmail.com> wrote in message
news:mpdfl0h28m9m6t0pl9o6n1hicd3dajvlei@4ax.com...
> En Roy Lewallen va escriure en Thu, 23 Sep 2004 12:29:06 -0700:
>
> >Thanks for the responses. The suggestions were constructive, and they
> >confirmed my observation that some people will do just about anything,
> >including newsgroup posting, to avoid looking in the manual.
> >
> >Roy Lewallen, W7EL
>
>
> Hi Roy,
>
> It is true that your program's user interface is not the best in
> the world, but... Who cares? I think the free version of EZNEC
> has made a lot for the ham community, much more than some of the
> people criticizing you.
>
> Best regards,
>
> --
> Toni
>
> "Auto" = prefijo griego que significa "no funciona"

Hi Tony,

There have been over 2 million copies of
my freeware 'Quickyagi' downloaded, with
zero (0) complaints from users. Free, isn't
everything, y'know... :)

WA7RAI

3768. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 21:49:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v7del09m9s8hm3ima0nftndunfgumr62vt@4ax.com>
Source record: 88989

On Mon, 27 Sep 2004 21:18:45 GMT, "John Smith"
<kd5yikes@mindspring.com> wrote:
>> Shown in "Antennas for All Applications" on page 820, figure 23-17 (a) is
>> a folded dipole which looks as if it could be easily constructed from
>> RG58.

Um, actually it quite explicitly states it uses "Cool Cable." You
might try some Hip Cable as a substitute.

>>This antenna would be appealing because of the natural balun.

The "natural" of the BalUn is probably in the balance and the
orthogonal geometry.

>> However, they make no mention of the required coax velocity factor nor of
>> the terminal impedance.

Reckon on the outer surface velocity factor (it is really only a thick
radiator) which, if you are using solid coax is 1 (lower if it has
insulation).

>> I tried constructing one and measuring with a
>> vector voltmeter but the data were inconclusive. That is, I don't think I
>> know how to make measurements like this at 440 MHz yet. It is much
>> trickier than I thought.

Please share your data.

>>
>> In any case, can someone tell me:
>>
>> - Can RG58 be used, or will the velocity factor mess up the antenna?

already answered.

>> - What will be the terminal impedance?

Depends on dimension, folded dipoles multiply the load on the basis of
separation and ratios of thickness of each side of the fold (in this
case I presume it is identical - so the relation, if I recall
correctly will be roughly 4 fold for halfwave dimension or 300 Ohms).

I concentrate mostly on HF design, so someone will probably (now why
would I say probably?) correct any mistakes offered here.

>> - Will the terminal impedance change as the gap between the elements vary?

Only if it is a remarkably variation. Bench top precision in
construction at 440 MHz is not going to upset anything radically.

>> (I consider the "terminal" at the midpoint of the bottom element)

It is actually at the gap. The midpoint of the bottom element is
electrically neutral which makes mounting simpler.

>The picture of this antenna can be found at
>
>http://www.sophisticatedsolutions.us/images/Folded%20Dipole.jpg

73's
Richard Clark, KB7QHC

3769. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 22:40:25 UTC
From: micropower_fm@hotmail.com
Message-ID: <45cc755c.0409271440.470cbf36@posting.google.com>
Source record: 88990
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

Hmm, this seems to go against all the advice I've gotten so far, about getting as much of the antenna outside as possible...I find it hard to believe that an active antenna is going to get better reception than a 75' wire, but if it does, than it does...

3770. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 22:59:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f7iel0ti4cksfbe64mnf11ljpq6tddmb3s@4ax.com>
Source record: 88991
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

On 27 Sep 2004 15:40:25 -0700, micropower_fm@hotmail.com (TheGnome)
wrote:
>Hmm, this seems to go against all the advice I've gotten so far, about
>getting as much of the antenna outside as possible...I find it hard to
>believe that an active antenna is going to get better reception than a
>75' wire, but if it does, than it does...

Hi OM,

Not sure what you are responding to, but the implication you offer of
an active antenna surviving in a field of noise better than a remote
antenna is a sure cause of wonderment.

73's
Richard Clark, KB7QHC

3771. Re: jo gunn 10/11meter ant. look at there web site

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 23:24:41 UTC
From: Wally Gator <me@mycrib.com>
Message-ID: <Zi16d.4128$YI2.3021@fe1.columbus.rr.com>
Source record: 88993

jcooper874@webtv.net wrote:
> www.jogunn.com they are to high for me what do yall think 73s
>
From their web site for 11 meter antennas:
"The STAR Antennas are high perfomance (spelled performance) long
distance ground wave antennas. They will do an excellent job in DX with
power - handling capabilities rated at 5 KW."

1. DX is not allowed on 11M.
2. 5KW is not allowed on 11M.
3. I will never buy a 10M antenna with the name "Hillbilly" in the title.

So, I'd say study real hard, get a Ham Radio license, build a dipole,
and get rid of the Mullet wearing/Bubba mentality.

Just my .02
Y'all

3772. Help:Best vertical for low bands ? advice

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 23:31:18 UTC
From: fjx1@aol.comnospam
Message-ID: <20040927193118.03318.00001286@mb-m17.aol.com>
Source record: 88992

Of the factory made verticals for 40 and 80 (I know none are great) which is best/ Hustler, cushcraft, hy gain, mfj, gap, butternut? If it put a signal out on 160 that would be a bonus. Can't run sloper here so need one of these ground mounted wtith radials. Tks.

3773. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-27 23:58:17 UTC
From: bjmlittle00@aol.com
Message-ID: <20040927195817.27426.00000724@mb-m01.aol.com>
Source record: 88994

Sorry....I want it for base use. Just a vertical for now. I just want to get on 6 and 2 reliably.
Thanks
Buck

3774. Re: Antenna analyzer?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 00:34:55 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <10lhccppnckece9@corp.supernews.com>
Source record: 88995

Dear Neighbor:
I might be able to do just that. New semester starts in one week so I
am both busy and flexible.
You are about 30 to 35 miles due north of me. What are bad times/days?
73 Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Roger Halstead" <Delete-Invallid.groups@tm.net> wrote in message
news:fp6fl0t01bv0jn9olvjm06odudr692t9aq@4ax.com...
> On Fri, 24 Sep 2004 22:03:41 -0400, "J. Mc Laughlin"
> <jcm@power-net.net> wrote:
>
> >Dear Neighbor:
> > I use the AEA-CIA. It might be a bit large to take up a tower, but I
> >have found it to be very useful.
>
> I may give that a try. course you could stop by for coffee and bring
> yours along<:-))
>
> 73
>
> Roger (K8RI)
> > 73 Mac N8TT
>
> Roger Halstead (K8RI & ARRL life member)
> (N833R, S# CD-2 Worlds oldest Debonair)
> www.rogerhalstead.com

3775. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 00:47:12 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4unel0p85ld8sqfsnf9ipa8kbblddpu1mv@4ax.com>
Source record: 88996

On Sun, 26 Sep 2004 13:04:18 -0700, "Chuck" <wa7rai@raibeam.com>
wrote:

>The zealots are unintentionally giving the
>mega-corps and the mega-rich the power to
>virtually run this country. Being in absolute
>control of the FCC, what they will eventually
>do with the radio spectrum (in the interest of
>mega-profits) will not be in the interest of
>amateur radio - the BPL boondoggle, is a
>precursor and good example of what to
>expect from an exclusively neo-con, pro
>mega-corp government.

"Now I saw in my dream that Christian and Hopeful forsook Mr. By-ends,
and kept their distance before him; but one of them looking back, saw
three men following Mr. By-ends, and behold, as they came up with him,
he made them a very low bow; and they also gave him a compliment. The
men's names were Mr. Hold-the-world, Mr. Money-love, and Mr. Save-all;
men that Mr. By-ends had formerly been acquainted with; for in their
minority they were schoolfellows, and were taught by one Mr.
Gripe-man, a schoolmaster in Love-gain, which is a market town in the
county of Coveting, in the north. This schoolmaster taught them the
art of getting, either by violence, cozenage, flattery, lying, or by
putting on the guise of religion; and these four gentlemen had
attained much of the art of their master, so that they could each of
them have kept such a school themselves.

"Well, when they had, as I said, thus saluted each other, Mr.
Money-love said to Mr. By-ends, Who are they upon the road before us?
(for Christian and Hopeful were yet within view).

"BY-ENDS. They are a couple of far countrymen, that, after their mode,
are going on pilgrimage.

"MONEY-LOVE. Alas! Why did they not stay, that we might have had
their good company? for they, and we, and you, Sir, I hope, are all
going on pilgrimage.

"BY-ENDS. Why, they, after their headstrong manner, conclude that it
is duty to rush on their journey all weathers; and I am for waiting
for wind and tide. They are for hazarding all for God at a clap; and
I am for taking all advantages to secure my life and estate. They are
for holding their notions, though all other men are against them; but
I am for religion in what, and so far as the times, and my safety,
will bear it. They are for religion when in rags and contempt; but I

am for him when he walks in his golden slippers, in the sunshine, and with applause."

73's
Richard Clark, KB7QHC

3776. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 01:29:23 UTC
From: Wall E Gator <me@mycrib.com>
Message-ID: <T736d.123947$787.113673@fe2.columbus.rr.com>
Source record: 88997

Bjmlittle00 wrote:
> Sorry....I want it for base use. Just a vertical for now. I just want to get on
> 6 and 2 reliably.
> Thanks
> Buck
http://www.ozhelpservices.com/50MHz_JPole.htm
http://www.qsl.net/wb8erj/146jpole.htm

3777. Re: Help:Best vertical for low bands ? advice

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 01:30:22 UTC
From: Wall E Gator <me@mycrib.com>
Message-ID: <O836d.123959$787.56041@fe2.columbus.rr.com>
Source record: 88998

Fjx1 wrote:

> Of the factory made verticals for 40 and 80 (I know none are great) which is
> best/ Hustler, cushcraft, hy gain, mfj, gap, butternut? If it put a signal out
> on 160 that would be a bonus. Can't run sloper here so need one of these ground
> mounted wtith radials. Tks.

Butternut 9 bander with the 160 add-on kit.
Not perfect, but a good antenna.

3778. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 01:53:33 UTC
From: bjmlittle00@aol.com
Message-ID: <20040927215333.25923.00001509@mb-m03.aol.com>
Source record: 88999

I want one antenna that will work for both bands. I have a Jpole for 6 but I want to replace it with one antenna and work both
Buck

3779. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 02:15:51 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <55ihl0loisajha2vhq88lmp91dber5p02s@4ax.com>
Source record: 89000

On 28 Sep 2004 01:53:33 GMT, bjmlittle00@aol.com (Bjmlittle00) wrote:

>I want one antenna that will work for both bands. I have a Jpole for 6 but I
>want to replace it with one antenna and work both
>Buck

The two bands are not quite harmonically related, so getting one
antenna to work for both will be tough.

You might look at a 5/8 wave antenna for two meters. It could be
within yelling distance of a 1/4 wave for somewhere on 6 meters.

bob
k5qwg

3780. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 02:27:48 UTC
From: Marty Albert <kc6ufm@sbcglobal.net>
Message-ID: <c1jhl0degarlnac3fb18q13ibe27vd9mnd@4ax.com>
Source record: 89001

What about a copper cactus?

See:

http://archimedes.galilei.com/raiar/cactus.html

I have built several with excellent results.

Take Care & 73

de Marty KC6UFM

On Tue, 28 Sep 2004 02:15:51 GMT, Bob Miller <rmiller47@satx.rr.com>
mused:

>On 28 Sep 2004 01:53:33 GMT, bjmlittle00@aol.com (Bjmlittle00) wrote:
>
>>I want one antenna that will work for both bands. I have a Jpole for 6 but I
>>want to replace it with one antenna and work both
>>Buck
>
>The two bands are not quite harmonically related, so getting one
>antenna to work for both will be tough.
>
>You might look at a 5/8 wave antenna for two meters. It could be
>within yelling distance of a 1/4 wave for somewhere on 6 meters.
>
>bob
>k5qwg
>
>

3781. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 02:39:41 UTC
From: "NN7Kex(NOSPAM)k7zfg" <"NN7Kex(NOSPAM)k7zfg"@sbcglobal.net>
Message-ID: <N946d.3762$nj.379@newssvr13.news.prodigy.com>
Source record: 89002

Bob Miller wrote:

> On 28 Sep 2004 01:53:33 GMT, bjmlittle00@aol.com (Bjmlittle00) wrote:
>
>
>>I want one antenna that will work for both bands. I have a Jpole for 6 but I
>>want to replace it with one antenna and work both
>>Buck
>
>
> The two bands are not quite harmonically related, so getting one
> antenna to work for both will be tough.
>
> You might look at a 5/8 wave antenna for two meters. It could be
> within yelling distance of a 1/4 wave for somewhere on 6 meters.
>
> bob
> k5qwg

2 antennas might fulfill your requirements-- The Larson 2 meter 5/8 wave,
mounted on a piece of pipe , aprox . 57-60 inches long, with a cap, and
BIGGER than the coax/connector your useing. (to make a "coaxial verticle)
or-- build a ground-plane, again, with the larson antenna (0r a whip
aproximately 55 inches long, but this time , use radials , in the horizontal
plane. works on 6 meters as 1/2 wave, 2 meters as a 5/8 wave, mounted against
a 1/4 wave (for counterpoise)! And, the 144 MHz works even better on six,
folks have found, than their 50 MHz verticle for mobile! easy to build,
especially the coaxial antenna, if you have a drillbit for the vertical -
just drill thru the cap! Jim NN7K

3782. Re: 6 and 2 meter homebrew????

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 02:56:39 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <ko46d.75297$zT6.19154@bignews5.bellsouth.net>
Source record: 89003

One antenna WILL WORK -
Make a Discone for 6 meters - it should work at the higher freqs also

"Bjmlittle00" <bjmlittle00@aol.com> wrote in message
news:20040926203556.02596.00001280@mb-m13.aol.com...
> I am wanting to make an antenna that will work for 6 meters and 2 meters.
Can
> someone provide a newbie with some suggestions???
> Thanks
> Buck

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.770 / Virus Database: 517 - Release Date: 9/27/2004

3783. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 03:02:27 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <7v46d.20646$QJ3.17561@newssvr21.news.prodigy.com>
Source record: 89004

Richard Clark wrote:
> On Sun, 26 Sep 2004 13:04:18 -0700, "Chuck" <wa7rai@raibeam.com>
> wrote:
>
>
>>The zealots are unintentionally giving the
>>mega-corps and the mega-rich the power to
>>virtually run this country. Being in absolute
>>control of the FCC, what they will eventually
>>do with the radio spectrum (in the interest of
>>mega-profits) will not be in the interest of
>>amateur radio - the BPL boondoggle, is a
>>precursor and good example of what to
>>expect from an exclusively neo-con, pro
>>mega-corp government.
>
>
> "Now I saw in my dream that Christian and Hopeful forsook Mr. By-ends,
> and kept their distance before him; but one of them looking back, saw
> three men following Mr. By-ends, and behold, as they came up with him,
> he made them a very low bow; and they also gave him a compliment. The
> men's names were Mr. Hold-the-world, Mr. Money-love, and Mr. Save-all;
> men that Mr. By-ends had formerly been acquainted with; for in their
> minority they were schoolfellows, and were taught by one Mr.
> Gripe-man, a schoolmaster in Love-gain, which is a market town in the
> county of Coveting, in the north. This schoolmaster taught them the
> art of getting, either by violence, cozenage, flattery, lying, or by
> putting on the guise of religion; and these four gentlemen had
> attained much of the art of their master, so that they could each of
> them have kept such a school themselves.
>
> "Well, when they had, as I said, thus saluted each other, Mr.
> Money-love said to Mr. By-ends, Who are they upon the road before us?
> (for Christian and Hopeful were yet within view).
>
> "BY-ENDS. They are a couple of far countrymen, that, after their mode,
> are going on pilgrimage.
>
> "MONEY-LOVE. Alas! Why did they not stay, that we might have had
> their good company? for they, and we, and you, Sir, I hope, are all
> going on pilgrimage.
>
> "BY-ENDS. Why, they, after their headstrong manner, conclude that it
> is duty to rush on their journey all weathers; and I am for waiting

> for wind and tide. They are for hazarding all for God at a clap; and
> I am for taking all advantages to secure my life and estate. They are
> for holding their notions, though all other men are against them; but
> I am for religion in what, and so far as the times, and my safety,
> will bear it. They are for religion when in rags and contempt; but I
> am for him when he walks in his golden slippers, in the sunshine, and
> with applause."
>
> 73's
> Richard Clark, KB7QHC

This sounds like Pilgrim's Progress. I never thought, in my wildest dreams, anyone would ever quote it on the internet.
73,
Tom Donaly, KA6RUH

3784. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could I Make a1/2 Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 03:24:06 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <2O46d.75338$zT6.69472@bignews5.bellsouth.net>
Source record: 89005

If you built a dipole, then it was (most likely) not a quarter-wave - but a half-wave
a j-pole may be a good choice given the situation that it needs to be 'out the window' and is uhf
or, for that matter, a coaxial half-wave dipole. (strip and fold back 1/4-wave of braid - and weatherproof it)

"WolfMan" <WMan@W2GLI.com> wrote in message news:3_W5d.5585$NS1.2618920@news4.srv.hcvlny.cv.net...
> I'm Limited To An Antenna On The Front Of My House. Out My Window I Made A Simple !/4 wave Verticle Dipole. Would A 1/2 Wave Simply Be Twice The Length, Using 462/f Mhz, And Would There Be An Advantage With A 1/2 Wave Over a 1/4 Wave ?
> Thanks

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.770 / Virus Database: 517 - Release Date: 9/27/2004

3785. Re: Outbacker on a tripod - will this work ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 04:04:54 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <Gp56d.271517$mD.104521@attbi_s02>
Source record: 89006

"Peter Taucher" <hamnews@abwesend.de> wrote in message
news:cj9hap$99d$01$1@news.t-online.com...
> Hi,
>
> I am running an 817 and I'd like to go out portabel with this rig.
>
> I am planning to buy an Outbacker on a tripod, using a handmade metal
> mount with the possibility to attach a counterpoise.
>
> Will the Outbacker work in this setup? Or does it need a lot of metal like
> cars habe?
>
> I would use a counterpoise of course.
>
> Any hints or suggestions?
>
> vy 73
> Peter
>

Peter -

I have been running the Outbacker "outreach" for almost 10 years for a 3rd floor patio .. have worked 100 countries (largely 20, 15, 10 with a bit on 17 and 40) ... I don't stay up late enough for 75 meters outside of the locals. I DO use the Alpha Delta OUTPOST- Tripod/ground coupler ground mount system (serves as a counterpoise) for use with the OUTREACH. http://www.alphadeltacom.com/pg5.htm

Next question?

Greg, w9gb

3786. Re: Outbacker on a tripod - will this work ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 04:06:41 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <lr56d.271521$mD.121037@attbi_s02>
Source record: 89007

"Peter Taucher" <hamnews@abwesend.de> wrote in message
news:cj9hap$99d$01$1@news.t-online.com...
> Hi,
>
> I am running an 817 and I'd like to go out portabel with this rig.
>
> I am planning to buy an Outbacker on a tripod, using a handmade metal
> mount with the possibility to attach a counterpoise.
>
> Will the Outbacker work in this setup? Or does it need a lot of metal like
> cars habe?
>
> I would use a counterpoise of course.
>
> Any hints or suggestions?
>
> vy 73
> Peter
>
Peter -

I have been running the Outbacker "outreach" for almost 10 years for a 3rd floor patio .. have worked 100 countries (largely 20, 15, 10 with a bit on 17 and 40) ... I don't stay up late enough for 75 meters outside of the locals. I DO use the Alpha Delta OUTPOST- Tripod/ground coupler ground mount system (serves as a counterpoise) for use with the OUTREACH. http://www.alphadeltacom.com/pg5.htm

Works for me.

Greg, w9gb

3787. TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 04:07:44 UTC
From: "G.Beat" <now9spamgb@no.comcast.spam.net.invalid>
Message-ID: <gs56d.379670$8_6.123237@attbi_s04>
Source record: 89008

TEST MESSAGE

3788. Re: jo gunn 10/11meter ant. look at there web site

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 04:40:12 UTC
From: jcooper874@webtv.net
Message-ID: <11503-4158EB2C-452@storefull-3277.bay.webtv.net>
Source record: 89010

lol i no how do you get audio gain from a antenna

3789. Re: TEST

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 04:53:17 UTC
From: I Care <icare@whocares.com>
Message-ID: <MPG.1bc28e177a3e15009896db@netnews.comcast.net>
Source record: 89009

In article <gs56d.379670$8_6.123237@attbi_s04>,
now9spamgb@no.comcast.spam.net.invalid says...
> TEST MESSAGE
>
>
>
Test Answer

3790. Re: Help:Best vertical for low bands ? advice

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 06:09:36 UTC
From: nm5k@wt.net
Message-ID: <25eb70d7.0409272209.44a8ce9a@posting.google.com>
Source record: 89011

fjx1@aol.comnospam (Fjx1) wrote in message
news:<20040927193118.03318.00001286@mb-m17.aol.com>...
> Of the factory made verticals for 40 and 80 (I know none are great) which is
> best/ Hustler, cushcraft, hy gain, mfj, gap, butternut? If it put a signal out
> on 160 that would be a bonus. Can't run sloper here so need one of these ground
> mounted wtith radials. Tks.

Of the ones I know about, I think the butternut HF2V is the best. And
they do make an add on kit for 160. The HF2V is a 40/80 vertical , and
is a full 1/4 wave on 40m. I think they also make a 30m kit if I
remember right...Also they have a top loading kit for the lower bands.
But you could do just as well with a 32 ft wire hung from a tree, and
a tapped coil at the base...For much less $$$$ too....The HF2V will
smoke the HF9V "the all band version" on the lower bands. MK

3791. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 06:43:06 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <slcfl0996eu00a78eu5c0egvqspu92egjf@4ax.com>
Source record: 89012

On Tue, 28 Sep 2004 03:02:27 GMT, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

>This sounds like Pilgrim's Progress.

It is.

Hi Tom,

When common sense takes the back seat (or left to hitch-hike home),
fables have often risen in defense against the caprice of arbitrary
power. Literature is rich in regard to the travesty of logic that is
being passed off as the boon of a new age. I could have as easily
found material in the Canterbury Tales, The Decameron, The Song of
Roland, The Poem of the Cid.... The effete nabobs of negativism in
our Administration shrink in sharp contrast to the legendary heroes of
fighting cultures. Bush in his flight suit and helmet reminds me of
that pathetic picture of Dukakis in the Tank - what a matched pair!

73's
Richard Clark, KB7QHC

3792. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 07:07:56 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040928030756.11378.00001026@mb-m15.aol.com>
Source record: 89013

Chuck,

If you check American History, you will see a lot of colonies were founded for religious freedom. As a Baptist, one of our unique features is an emphasis on religious liberty. We can agree to disagree, but true Chrisitanity seeks liberty. Also, many of our presidents were Christian or religious. Religious expression is found in our guiding documents, such as the Dec. of Independence, and the Constitution.

Islam is not the same as Christianity. Not all religions are the same or teach the same. Just remember that "theology" can be different, but ethics, such as the Golden Rule, can be the same.Look at the core beliefs and you will see major differences. One of the differences is that Islam practices conversion by the sword. Some misguided Christians in the past have also practiced it, but as you point out the Sermon on the Mount does not support it.

I am a Christian "fanatic" as it is my job and my passion. It has changed my life for the better. I vote my Christian beliefs, irregardless of the political party. And the Bible tells us to pray for the kings over us. Since we do not have a king, but we can see a principle to pray for our government leaders - All of them.

It is not lunacy to accept and practice religious belief (and I am talking in general terms of all the world religions and sects). What is lunacy is to misapply religion and use for personal gain, to control people or put people down because of differing beliefs (For more religious discrimination, check out Islam and Hinduism, and the Eastern Orthodox churches).

As you said, the foundation of American Values is liberty and that includes the free practice of religious beliefs.

BTW instead of WWJD, WRJU - What Radio would Jesus Use? With all of his travels, I would guess an FT-817 portable radio. :-)

Randy

3793. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 07:12:06 UTC
From: Toni <post_to_usenet@hotmail.com>
Message-ID: <so2il0t940vhre0heus3fb7ocu0n2unnuc@4ax.com>
Source record: 89014

En Chuck va escriure en Mon, 27 Sep 2004 14:41:59 -0700:

>There have been over 2 million copies of
>my freeware 'Quickyagi' downloaded, with
>zero (0) complaints from users. Free, isn't
>everything, y'know... :)

Hi Chuck,

I didn't know that program, but I'll Google for it and have a look. In any case, from it's name, I infer that it is a Yagui design/optimize program that may be very good, but only for advanced amateurs.

What I was referring to, and this is what makes EZNEC special, is the posibility of "try and see". You read about, for ex., delta match and go to EZNEC and try it. You can experiment what happens if the match is too long or too short or... whatever. This is specially good to check that your design is not too critical. If you see that small differences in element construction will cause big degradation you can forget building it with real tools and materials.

As for the price, effectively, free isn't everything but it helps with programs whose utility is not clear until you have used them for long enough. I know this is the shareware concept but I reckon it does not work for business. Roy's intermediate approach seems good to me: reduced but sufficient functionality for the masses and full for whoever pays it.

73's
--
Toni

"Auto" = prefijo griego que significa "no funciona"

3794. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 09:38:12 UTC
From: Ed Price <edprice@cox.net>
Message-ID: <5ia6d.86654$9Y5.27569@fed1read02>
Source record: 89015

"Theplanters95" <theplanters95@aol.comnospam> wrote in message
news:20040928030756.11378.00001026@mb-m15.aol.com...
> Chuck,
>
> If you check American History, you will see a lot of colonies were founded
> for
> religious freedom. As a Baptist, one of our unique features is an
> emphasis on
> religious liberty. We can agree to disagree, but true Chrisitanity seeks
> liberty. Also, many of our presidents were Christian or religious.
> Religious
> expression is found in our guiding documents, such as the Dec. of
> Independence,
> and the Constitution.

Yep, and that expression is one of hope that the government not be beholden to any Official Christianity. For the past couple of millennia, Official Christianity has been seeking the divine path and simultaneously exterminating all those who would diverge from the Official Truth. Life has gotten very troublesome when several competing versions of Official Christian Truth have had to share the same time and space.

Christianity does not seek liberty, and in the historical record, has often been liberty's greatest foe. Of the various flavors of Christianity available today, broadly, to be a Christian, you have to either recognize a religious hierarchy as superior to your individual liberty, or accept the literal word of the Bible, which can only be done by Faith (which let's you ignore a whole lot of problematic Biblical advice).

The trouble with being a True Believer is that there is no way to agree to disagree. No matter how politely you disagree with my truth, that's heresy! How can I let a heretic teach my kids in public school? I must struggle (in the best jihad sense) to help the truth prevail. You must be persuaded, re-educated, or.... eliminated.

BTW, I think that only Rhode Island & Providence Plantations was formed mostly for religious freedom (fleeing the hobnailed boots of religious intolerance then existing in....., uhhh, Massachusetts), all the other American colonies were formed to turn a profit for an investment trust. And, a hundred years later, those God-fearing folks were up to their eyebrows in utilizing and turning a big profit from black slavery. Who woulda thunk it, Brown Sugar?

Ed
wb6wsn

3795. Re: My apologies to the group!

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 09:46:12 UTC
From: Steveo <moparholic@hotmail-nospam.com>
Message-ID: <20040928054612.673$Rd@newsreader.com>
Source record: 89016
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.cb,rec.radio.amateur.antenna

N8WWM is a felon.

http://tinyurl.com/4p3gs

iamnotgeorge2004@yahoo.com (I Am Not George) wrote:
> Steveo <moparholic@hotmail-nospam.com> wrote in message
> news:<20040927155214.261$Lt@newsreader.com>...
> > N8WWM is a felon.
> >
> > "KC8QJP" <KC8QJP@crisco.net> wrote:
> > > http://www.geocities.com/keyklownslappa/index.html?1075823179430
> > > "WA8ULX" <wa8ulx@aol.com> wrote in message
> > > news:20040927131428.16506.00000924@mb-m27.aol.com...
> > > > >I am hot to trott and I got
> > > >>the guetto booty jus for you. I used to be a car parking lot
> > > >>attendant but I got caught cheating. Damn it, when I signed up for
> > > >>this gig I was told I was going to make a lot of money . Damn lying
> > > >>schools. Piss on em. I got my own ways of makin da cash......Dougay
> > > >>is my main man, but he is smallish so I need da big johnso to make
> > > >>me feel betta about myself
> > > >
> > > > There you go Folks a perfect example of Dumbing Down, and your NEW
> > > > CBplusser
> > > > Knuckle Draggin Guys you want into what use to be called HAM RADIO
> > > >
>
> mopedope is a mewling frustration ball who cant stop dissent about his
> illegal keyclown radio hobby ROTFLMAO

3796. 88 ft + 66 ft fanned doublet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 11:35:33 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <3ciil0p72th5ikatrpvlifvt143mnfhu1u@4ax.com>
Source record: 89017

Will such a wire antenna give me good coverage of all HF ham bands 80M
and shorter?

According to Cebik in his article, ï¿½My Top Five Backyard Multi-Band
Wire HF antennas," an 88 ft doublet (or double zepp) is not so good
for 10, 12, 15 or 17M, whereas a 44 ft doublet is good on those
bands. See:
http://www.cebik.com/fdim/fdim9.pdf

Will a fanned doublet using 88 ft and 44 ft wires cover all the HF
bands, 80M and shorter? How about 88 ft and 33 ft?

If fanning works, is there a shorter wire that will give me 6, 10, 12,
15 and 17M?

Ken KC2JDY

Ken
(to reply via email
remove "zz" from address)

3797. Re: 88 ft + 66 ft fanned doublet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 11:36:47 UTC
From: Ken <cprstn54zz@att.net>
Message-ID: <s5jil0tj4slj0p1ari10pmaflb9v3f9ct7@4ax.com>
Source record: 89018

On Tue, 28 Sep 2004 11:35:33 GMT, Ken <cprstn54zz@att.net> wrote:

Ooops. Subject should have been "88 + 44 ft fanned doublet"
Ken
(to reply via email
remove "zz" from address)

3798. Re: 88 ft + 66 ft fanned doublet?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 13:01:40 UTC
From: Bob Miller <rmiller47@satx.rr.com>
Message-ID: <ipnil0l0aa3o6t1g01m50j0taho8343lhb@4ax.com>
Source record: 89019

On Tue, 28 Sep 2004 11:35:33 GMT, Ken <cprstn54zz@att.net> wrote:

>Will such a wire antenna give me good coverage of all HF ham bands 80M
>and shorter?
>
>According to Cebik in his article, ï¿½My Top Five Backyard Multi-Band
>Wire HF antennas," an 88 ft doublet (or double zepp) is not so good
>for 10, 12, 15 or 17M, whereas a 44 ft doublet is good on those
>bands.

I recently had a 44-ft doublet up, with 42 feet of 450 ohm line to a
coiled coax choke balun. With my tuner, it worked well from 30 thru
10, and required no tuner at all on 12. If you combined that with
something for 40 & 80, you'd be all set.

Bob
k5qwg

See:
>http://www.cebik.com/fdim/fdim9.pdf
>
>Will a fanned doublet using 88 ft and 44 ft wires cover all the HF
>bands, 80M and shorter? How about 88 ft and 33 ft?
>
>If fanning works, is there a shorter wire that will give me 6, 10, 12,
>15 and 17M?
>
>Ken KC2JDY
>
>
>
>
>Ken
>(to reply via email
>remove "zz" from address)

3799. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 13:52:05 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <90e6d.12147$gG4.7131@newsread1.news.pas.earthlink.net>
Source record: 89020

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:v7del09m9s8hm3ima0nftndunfgumr62vt@4ax.com...
> On Mon, 27 Sep 2004 21:18:45 GMT, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>>> Shown in "Antennas for All Applications" on page 820, figure 23-17 (a)
>>> is
>>> a folded dipole which looks as if it could be easily constructed from
>>> RG58.
>
> Um, actually it quite explicitly states it uses "Cool Cable." You
> might try some Hip Cable as a substitute.

I put some RG58 on ice.

>>> I tried constructing one and measuring with a
>>> vector voltmeter but the data were inconclusive. That is, I don't think
>>> I
>>> know how to make measurements like this at 440 MHz yet. It is much
>>> trickier than I thought.
>
> Please share your data.

I no longer have the data. I thought it was worthless since it made no sense
and I discarded it.

>>>
>>> In any case, can someone tell me:
>>>
>>> - Can RG58 be used, or will the velocity factor mess up the antenna?
>
> already answered.
>
>>> - What will be the terminal impedance?
>
> Depends on dimension, folded dipoles multiply the load on the basis of
> separation and ratios of thickness of each side of the fold (in this
> case I presume it is identical - so the relation, if I recall
> correctly will be roughly 4 fold for halfwave dimension or 300 Ohms).

So, I should use 300 Ohm coax?

>>> - Will the terminal impedance change as the gap between the elements
>>> vary?
>
> Only if it is a remarkably variation. Bench top precision in
> construction at 440 MHz is not going to upset anything radically.

>
>>> (I consider the "terminal" at the midpoint of the bottom element)
>
> It is actually at the gap. The midpoint of the bottom element is
> electrically neutral which makes mounting simpler.

Suppose I construct the antenna as shown except put a Tee at the bottom for convenience. What will be the impedance at that point? After all, that would now be the feed point, yes?

>>The picture of this antenna can be found at
>>
>>http://www.sophisticatedsolutions.us/images/Folded%20Dipole.jpg
>
> 73's
> Richard Clark, KB7QHC

Thanks,
John

3800. Tower / Antenna package for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 14:14:04 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <Mke6d.213$kq6.105769@news4.srv.hcvlny.cv.net>
Source record: 88871

Tower / Antenna Package $1400

Pickup only - Location near Poughkeepsie, NY

Universal 40' tilt-over aluminum tower
Includes rotor shelf, bolts, leg stubs.
Installed 2 years. Now on ground.
Used with light load (the quad listed below).
Can haul in any light pickup truck.
You need to buy the legs that go into your concrete base.

Cubex 5-band Quad
20, 17, 15, 12 , 10 meters.
Separate feeds; includes coax stubs for all bands.
New (still in box) wire elements.
Extra boom (can be used as mast)
Fiberglass spreaders in exellent condition.

Amertron 5-way remote coax switch and control
Includes about 125' cable.
Needed for separate quad feeds.
Perfect condition.

Yaesu G450A rotator and control
Includes about 125' cable.
Excellent condition.
Perfect for quad.

All in excellent condition. You can inspect everything.

You need to add the coax feed, the legs that go into your
concrete base, and about 2 yards of concrete.

Replacement cost over $2600 + $$$ shipping.

Bill Ogden
W2WO
845-691-2065

3801. Re: Outbacker on a tripod - will this work ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 14:14:41 UTC
From: Peter Taucher <hamnews@abwesend.de>
Message-ID: <cjbrkh$fm6$03$1@news.t-online.com>
Source record: 88872

G.Beat schrieb:

> Next question?
Can you tell me the SWR on the bands?

3802. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 14:33:33 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <1De6d.5748$%t3.2636@lakeread01>
Source record: 88873

"Richard Clark" <kb7qhc@comcast.net> wrote
/snip
> fighting cultures. Bush in his flight suit and helmet reminds me of
> that pathetic picture of Dukakis in the Tank - what a matched pair!
>
> 73's
> Richard Clark, KB7QHC

Hi Richard, need we point out to you the absurdity of comparison between a pretender waving from armor he never saw before in his life, to a qualifed USAF jet fighter pilot who gets suited back up for a carrier landing? We can find a lot of things to disagree with President Bush's policies about, but one thing he is not, is a phony.

73,
Jack Painter
Virginia Beach VA

3803. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 14:40:59 UTC
From: richardharrison@webtv.net
Message-ID: <8023-415977FB-117@storefull-3251.bay.webtv.net>
Source record: 88875

WolfMan wrote:
"And would there be an advantage with a 1/2-wave over a 1/4-wave?"

Short answer: Yes.

A dipole is directive. It has nulls at its ends and concentrates response perpendicular to the wire. Even a very short, almost vanishing dipole has these directional characteristics to some extent.

The theoretical isotropic antenna is the only truly nondirectional, gainless antenna. Directive gain is the power intensity that is radiated in the perferred direction versus the power intensity averaged in all directions (1955 Terman, page 871).

Directive gain of an elementary doublet (dipole) is 1.5 as compared with an isotropic. The gain of a resonant 1/2-wave is only 1.64, which is only some better than a very short elementary doublet.

Gain and directivity are only part of the antenna story. Radiation resistance and loss resistance appear as series components of a load resistance. The larger the radiation resistance is as compared with loss resistance, the more efficient is the antenna.

Radiation resistance of a short dipole is almost proportional to the square of its length. So, it rised rapidly as the antenna gets longer in terms of wavelength for the too short antenna. More radiation resistance is usually better because efficiency rises.

Kraus says in his 1950 edition on page 137 that a dipole of 0.1 wavelength has a radiation resistance of 7.9 ohms. If the dipole is only 0,01 wavelength, its radiation resistance is 0.08 ohms. This agrees with the length squared formula.

On page 146, Kraus says that the radiation resistance of an ordinary 1/2-wave dipole in free space is 73 ohms. This will be more efficient than an antenna about 1/2 the size in nearly all cases.

Best regards, Richard Harrison, KB5WZI

3804. Re: 4NEC2 and ARRL Antenna Modelling Course

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 14:44:01 UTC
From: 4nec2@gmx.net
Message-ID: <ee90361b.0409280644.77e459ea@posting.google.com>
Source record: 88874

Thomas <nospam@nospam.com> wrote in message news:<10k642oeodo6p0c@corp.supernews.com>...
> I will be taking the ARRL course
>
> http://www.arrl.org/cce/courses.html#ec004
>
> starting Oct. 1, 2004.
>
> Has anyone taken this course using 4NEC2 by Arie?
>
Yes, some have, and (already some time ago) one of them send me the
course manual to thank me for making 4nec2 available, so I was able to
check 4nec2 against the lessons included in the course.

Furthermore I somehow got a copy of all the example files in nec
format. For as far as I know (from my memory) all examples did work
without problems using 4nec2.

I am not quite sure, but maybe it's also possible to use the EZnec
demo which is for free. If you like it you can then still decide to
puchase the full EZnec version.

Success,
Arie.

3805. Re: jo gunn 10/11meter ant. look at there web site

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 15:18:31 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <bhf6d.9595$zA3.1972251@twister.southeast.rr.com>
Source record: 88876

<jcooper874@webtv.net> wrote in message
news:681-41578D58-141@storefull-3273.bay.webtv.net...
> www.jogunn.com they are to high for me what do yall think 73s
>
Just forget everything that could be said about the antennas. the specs are laughable. Yes they are overpriced even if they were a decent antenna. Plans on how to build a good 10M beam are too abundant to waste money on this as you can build your own from scratch using only a small amount of extra effort.

3806. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 16:14:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10lj3f2nftdl07f@corp.supernews.com>
Source record: 88877

Richard Harrison wrote:
> . . .
> Kraus says in his 1950 edition on page 137 that a dipole of 0.1
> wavelength has a radiation resistance of 7.9 ohms. If the dipole is only
> 0,01 wavelength, its radiation resistance is 0.08 ohms. This agrees with
> the length squared formula.
>
> On page 146, Kraus says that the radiation resistance of an ordinary
> 1/2-wave dipole in free space is 73 ohms. This will be more efficient
> than an antenna about 1/2 the size in nearly all cases.

The dipole Kraus is analyzing (shown in his fig. 5-1 on p. 127) isn't what we'd normally call an "ordinary dipole". As this figure and the accompanying text show, Kraus' short dipole is heavily end loaded to cause the current to be uniform along its length. This increases its radiation resistance by exactly a factor of four over that of a short unloaded dipole (a plain straight piece of wire fed in the center), whose current drops uniformly from the center to a value of zero at the ends.

The equation for a short unloaded dipole can be found in the same edition of Kraus on p. 262 as eq. 10-63, R11 = 5 * (beta * L)^2. The quantity in parentheses (beta * L) equals 2 * pi * the dipole length in wavelengths, so for a 0.1 wavelength dipole, it gives the radiation resistance as just a smidge under 2 ohms. (EZNEC gives just over 2 ohms for example model Dipole1.ez with the frequency changed to 60 MHz to make the antenna 0.1 wavelength long. Remember that the Kraus formula is an approximation, and for an infinitesimally thin antenna.)

This makes Richard's observation about efficiency even more true.

Roy Lewallen, W7EL

3807. Re: Outbacker on a tripod - will this work ?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 16:18:12 UTC
From: "G.Beat" <nonow9mapsgb@no.comcast.spam>
Message-ID: <89g6d.274062$Fg5.245114@attbi_s53>
Source record: 88878

"Peter Taucher" <hamnews@abwesend.de> wrote in message
news:cjbrkh$fm6$03$1@news.t-online.com...
> G.Beat schrieb:
>
>> Next question?
> Can you tell me the SWR on the bands?
>

Peter,

As you probably know, you change bands on the Outbacker by changing the tap.
There are separate taps for 75 and 80 meters.

The 2:1 bandwidth (as expected) for 75 and 80 meter usage is only about 50
kHz.

For 40 meters it is better - about 150 to 175 kHz .. although with the Icom
756Pro antenna tuner I can improve this a bit more.

For the higher frequencies (20 through 10 meters), it covers the bands
fairly well, but I only use about 250 kHz on the 20 meter allocation.

Disadvantage is having to move the tap .. if you change bands.

Advantage, you can disassemble the antenna fairly quickly for portable usage
(or antenna restriction requirements)

Greg
w9gb

3808. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 16:20:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <obegl0hp2569bvk1pnsol68ka2lpadl58o@4ax.com>
Source record: 88879

On Tue, 28 Sep 2004 10:33:33 -0400, "Jack Painter" <223bthp@cox.net>
wrote:

>We can
>find a lot of things to disagree with President Bush's policies about, but
>one thing he is not, is a phony.

Hi Jack,

Now there's a forced presumption. :-)

Then says Rollanz: "Wherefore so wroth with me?" He answers him:
"Comrade, it was your deed: Vassalage comes by sense, and not folly;
Prudence more worth is than stupidity. Here are Franks dead, all for
your trickery; No more service to Carlun may we yield. My lord were
here now, had you trusted me, And fought and won this battle then had
we, Taken or slain were the king Marsilie. In your prowess, Rollanz,
no good we've seen! Charles the great in vain your aid will seek --
None such as he till God His Judgement speak; -- Here must you die,
and France in shame be steeped; Here perishes our loyal company,
Before this night great severance and grief." AOI.

A pretty rough translation, no doubt about it, but from another:

"Then Roland says: 'Why are you angry with me?'
And he answers: 'Companion, it is your own doing, for knightly
courage used with prudence is one thing and folly is another, and
tempered judgment is more to be valued than the rashness of
arrogance. Those French are dead because of your heedlessness,
and we will never act again in Charles' service. If you had listened
to me, my lord would have returned and we would have won this
battle and King Marsiliun would have been captured or killed.
Woe to us, Roland, that we ever saw your bravery! Charles the
Great, a man whose like will never be see again until God judges
the world, will no longer be able to rely on our help, and you will
die, and shame will come to France. Today our faithful friendship
will end, and before evening we will have parted in sorrow."

73's
Richard Clark, KB7QHC

3809. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 16:48:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rnfgl0l13cmmq55fre7gnmjnn9lavdthv0@4ax.com>
Source record: 88880

On Tue, 28 Sep 2004 13:52:05 GMT, "John Smith"
<kd5yikes@mindspring.com> wrote:

>So, I should use 300 Ohm coax?

Hi John,

No such thing, or it would be quite expensive (amounting to no such
thing).

>Suppose I construct the antenna as shown except put a Tee at the bottom for
>convenience. What will be the impedance at that point? After all, that would
>now be the feed point, yes?

No. The feed point is at the inner conductor connection to the outer
conductor. The bend in the line (where you would put the tee) is
merely a bend in the line. You could choose any point in the line,
would that qualify it as a feed point? No. Your eye is merely drawn
to it through the magic of an illustration's symmetry. As a practical
matter, yes you could insert a tee there (provided you open one leg,
you see? even here we have to maintain the continuity out to the true
feed point).

I must add that my analysis on the Z transformation may be at fault.
Again, my focus is in larger antennas where these kind of machinations
would be prohibitive. Others should have chimed in by now, but they
seem transfixed with my postings on politics or bored altogether. It
seems to me that you already have the text description before you.
Certainly in a 800+ page tome Kraus isn't mute on the subject?

On the other hand, you have the instrumentation and the scale of
construction is not so demanding that you couldn't resolve this
yourself at the bench in an evening. We have too many dream weavers
here already and I have pleaded with them to perform simple tests that
apparently befuddle them. Imagine me posing the task of taking
several SWR measurements being responded to with 100 posting threads
of confusion as to how!

I would use solid coax simply because I have several hundred feet of
precision material. It was what we used for 900 MHz spread spectrum
so 400 MHz is no great shakes.

73's
Richard Clark, KB7QHC

3810. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could...

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 18:35:50 UTC
From: richardharrison@webtv.net
Message-ID: <11287-4159AF06-152@storefull-3257.bay.webtv.net>
Source record: 88881

Roy, W7EL wrote:
"The dipole Kraus is analyzing (as shown in his fig. 5-1 on page 127) isn`t what we`d normally call an ordinary dipole."

Yes. Roy is right. On page 136, Kraus says:
"Let us now calculate the radiation resistance of the short dipole of Fig. 5-1."

The dipole of Fig. 5-1 has its ends loaded with capacitive hats. The result of the very short, in terms of wavelength, dipole and its capacitive loading are to cause the same current throughout the dipole. This is not the case in an ordinary dipole where current drops to near zero at its ends.

My mistake was searching for numbers that would give an idea of how radiation resistance varies as an antenna drops in length below resonant length, and not reading the whole chapter.

As Roy says, on page 262 Kraus writes: When the length L is small, (10-62) reduces very nearly to R11 = 5(beta L)squared ohms.

Best regards, Richard Harrison, KB5WZI

3811. The Problem of Mixing Religion and Science

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 18:54:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <63ogl054pi3kra4vij6n2anhdjjp19l7le@4ax.com>
Source record: 88882

The Thermodynamics of Hell

The following is an actual question given on a University of Washington chemistry mid-term. The answer by one student was so "profound" that the professor shared it with colleagues, via the internet which is, of course, why we now have the pleasure of enjoying it as well.

Bonus question: Is Hell exothermic (gives off heat)or endothermic (absorbs heat)?

Most of the students wrote proofs of their beliefs using Boyle's Law (gas cools when it expands and heats when it is compressed) or some variant. One student wrote the following:

"First, we need to know how the mass of Hell is changing in time. So we need to know the rate at which souls are moving into Hell and the rate at which they are leaving. I think that we can safely assume that once a soul gets to Hell, it will not leave. Therefore, no souls are leaving. As for how many souls are entering Hell, let's look at the different religions that exist in the world today. Most of these religions state that if you are not a member of their religion, you will go to Hell. Since there is more than one of these religions and since people do not belong to more than one religion, we can project that all souls go to Hell. With birth and death rates as they are, we can expect the number of souls in Hell to increase exponentially. Now, we look at the rate of change of the volume in Hell because Boyle's Law states that in order for the temperature and pressure in Hell to stay the same, the volume of Hell has to expand proportionately as souls are added.

This gives two possibilities:

1. If Hell is expanding at a slower rate than the rate at which souls enter Hell, then the temperature and pressure in Hell will increase until all Hell breaks loose.

2. If Hell is expanding at a rate faster than the increase of souls in Hell, then the temperature and pressure will drop until Hell freezes over.

So, which is it? If we accept the postulate given to me by Jan during my Freshman year that, " ... it will be a cold day in Hell before I sleep with you," and take into account the fact that I still have not succeeded in having an affair with her, then # 2 above cannot be true, and thus I am sure that Hell is exothermic and will not freeze over."

This student received the only "A."

****

NOTE, the entirety of the material above is not mine, but arrived by email anonymously and unrelated to matters discussed in this group.

My only comment is that this should be a candidate for Instant Classic.

73's
Richard Clark, KB7QHC

3812. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 19:02:58 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <zDj6d.16564$3n.7788@okepread06>
Source record: 88884

Jack Painter <223bthp@cox.net> wrote in message news:1De6d.5748$%t3.2636@lakeread01...
>
> "Richard Clark" <kb7qhc@comcast.net> wrote
> /snip
> > fighting cultures. Bush in his flight suit and helmet reminds me of
> > that pathetic picture of Dukakis in the Tank - what a matched pair!
> >
> > 73's
> > Richard Clark, KB7QHC
>
> Hi Richard, need we point out to you the absurdity of comparison between a
> pretender waving from armor he never saw before in his life, to a qualifed
> USAF jet fighter pilot who gets suited back up for a carrier landing? We can
> find a lot of things to disagree with President Bush's policies about, but
> one thing he is not, is a phony.
>
> 73,
> Jack Painter
> Virginia Beach VA

A true believer you are, Jack...

Consider the fact that Bush did not complete
his pilot training by refusing to take his annual
flight physical and flight review, thus was
removed from flight status. Phoney docs aside,
his military record is good authority to verify this.
The fact that he claims to be a fighter pilot not
only makes the man a phony, he is a dishonest
one as well.

Oh... he was not a USAF officer, but a member
if the ANG - a USAF auxillary.

Chuck, WA7RAI

>
>

3813. Giant Cu Cactus antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 19:18:09 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <RNi6d.9626$zA3.1985081@twister.southeast.rr.com>
Source record: 88883

Neighborhood covenant was recently ammended to allow vertical antennas and to exclude beam antennas other than TV antennas and smaller. Fortunately for me my tribander was already grandfathered in, I lived here before it was a neighborhood.. I want to make the best of a Rhon 25 tower I have stored away. My tower is 50ft tall and could be extented even taller using vertical elements that did not support a load other than themselves. I was thinking of tuning the tower into a Giant copper Cactus antenna for 20M thru UHF by fastening 1/4 wl stubs on the side of the tower. Any reason why this would not work.

3814. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 20:19:39 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <zDj6d.16565$3n.6770@okepread06>
Source record: 88885

Theplanters95 <theplanters95@aol.comnospam> wrote in message
news:20040928030756.11378.00001026@mb-m15.aol.com...
> Chuck,
>
> If you check American History, you will see a lot of colonies were founded for
> religious freedom. As a Baptist, one of our unique features is an emphasis on
> religious liberty. We can agree to disagree, but true Chrisitanity seeks
> liberty. Also, many of our presidents were Christian or religious. Religious
> expression is found in our guiding documents, such as the Dec. of Independence,
> and the Constitution.
>
> Islam is not the same as Christianity. Not all religions are the same or teach
> the same. Just remember that "theology" can be different, but ethics, such as
> the Golden Rule, can be the same.Look at the core beliefs and you will see
> major differences. One of the differences is that Islam practices conversion
> by the sword. Some misguided Christians in the past have also practiced it,
> but as you point out the Sermon on the Mount does not support it.
>
> I am a Christian "fanatic" as it is my job and my passion. It has changed my
> life for the better. I vote my Christian beliefs, irregardless of the
> political party. And the Bible tells us to pray for the kings over us. Since
> we do not have a king, but we can see a principle to pray for our government
> leaders - All of them.
>
> It is not lunacy to accept and practice religious belief (and I am talking in
> general terms of all the world religions and sects). What is lunacy is to
> misapply religion and use for personal gain, to control people or put people
> down because of differing beliefs (For more religious discrimination, check out
> Islam and Hinduism, and the Eastern Orthodox churches).
>
> As you said, the foundation of American Values is liberty and that includes the
> free practice of religious beliefs.

Indeed, which includess the liberty to not practice
a religion as well.

To consider Hinduism and Islam as similar, strongly
suggests a lack of understanding of either.

In regards to discrimination, one must understand
Hinduism believes in the law of Karma: "as ye sow
so shall ye reap". If one is born to a lowly state in
this life, it is a result of bad actions in a previous life,
thus one is deserving of their current state of
existence.

That said, I agree that true Christianity seeks liberty
(It is obvious that the Christ's teachings were liberal)
but the modern Christian Churches do not practice
true Christianity at all.

Allow me to elaborate:

Islam, Judaism, and modern Christianity all believe
in the god of Abraham. The Christ said he came to
"throw out the old law" - which can only be construed
as meaning the OT and the god of Abraham.

Christ's God is a God of love, compassion, brotherly
love, humility, judge not, and live and let live, etc...

In contrast, Abraham's god was violent, angry,
hateful, jealous, full of spite, and sought vengeance
by killing the unfaithful.

From this, it is easy to see why the world is so
violent and full of hate, given that the major religions
use such a horrific deity as an example for living
one's life.

Chuck, WA7RAI

3815. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 20:43:57 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <4159cccd.7744425@news.blueyonder.co.uk>
Source record: 88886

On 28 Sep 2004 07:07:56 GMT, theplanters95@aol.comnospam
(Theplanters95) wrote:

>Islam is not the same as Christianity.

Maybe, but you both pray to the same God and Islam recognises Jesus
as a prophet. Who's right?

3816. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 20:51:25 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <h9k6d.3960$nj.192@newssvr13.news.prodigy.com>
Source record: 88887

Richard Clark wrote:
> On Tue, 28 Sep 2004 03:02:27 GMT, "Tom Donaly"
> <dtdonaly@sbcglobal.net> wrote:
>
>
>>This sounds like Pilgrim's Progress.
>
>
> It is.
>
> Hi Tom,
>
> When common sense takes the back seat (or left to hitch-hike home),
> fables have often risen in defense against the caprice of arbitrary
> power. Literature is rich in regard to the travesty of logic that is
> being passed off as the boon of a new age. I could have as easily
> found material in the Canterbury Tales, The Decameron, The Song of
> Roland, The Poem of the Cid.... The effete nabobs of negativism in
> our Administration shrink in sharp contrast to the legendary heroes of
> fighting cultures. Bush in his flight suit and helmet reminds me of
> that pathetic picture of Dukakis in the Tank - what a matched pair!
>
> 73's
> Richard Clark, KB7QHC

Hi Richard,
that's a good reason more people should take time
to read some of the old literature: to keep down the rate of
public hornswoggling of second-rate leaders.
73,
Tom Donaly, KA6RUH

3817. Re: The Problem of Mixing Religion and Science

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 20:55:16 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <4159CFB4.D9B2309D@uci.edu>
Source record: 88888

Richard Clark wrote:
>
> The Thermodynamics of Hell
>
> The following is an actual question given on a University of
> Washington chemistry mid-term. The answer by one student was so
> "profound" that the professor shared it with colleagues, via the
> internet which is, of course, why we now have the pleasure of
> enjoying it as well.
>
> Bonus question: Is Hell exothermic (gives off heat)or endothermic
> (absorbs heat)?
>
> Most of the students wrote proofs of their beliefs using Boyle's Law
> (gas cools when it expands and heats when it is compressed) or some
> variant. One student wrote the following:
>
> "First, we need to know how the mass of Hell is changing in time. So
> we need to know the rate at which souls are moving into Hell and the
> rate at which they are leaving. I think that we can safely assume that
> once a soul gets to Hell, it will not leave. Therefore, no souls are
> leaving. As for how many souls are entering Hell, let's look at the
> different religions that exist in the world today. Most of these
> religions state that if you are not a member of their religion, you
> will go to Hell. Since there is more than one of these religions and
> since people do not belong to more than one religion, we can project
> that all souls go to Hell. With birth and death rates as they are, we
> can expect the number of souls in Hell to increase exponentially. Now,
> we look at the rate of change of the volume in Hell because Boyle's
> Law states that in order for the temperature and pressure in Hell to
> stay the same, the volume of Hell has to expand proportionately as
> souls are added.
>
> This gives two possibilities:
>
> 1. If Hell is expanding at a slower rate than the rate at which souls
> enter Hell, then the temperature and pressure in Hell will increase
> until all Hell breaks loose.
>
> 2. If Hell is expanding at a rate faster than the increase of souls in
> Hell, then the temperature and pressure will drop until Hell freezes
> over.
>
> So, which is it? If we accept the postulate given to me by Jan during

> my Freshman year that, " ... it will be a cold day in Hell before I
> sleep with you," and take into account the fact that I still have not
> succeeded in having an affair with her, then # 2 above cannot be true,
> and thus I am sure that Hell is exothermic and will not freeze over."
>
> This student received the only "A."
>
> **********
>
> NOTE, the entirety of the material above is not mine, but arrived by
> email anonymously and unrelated to matters discussed in this group.
>
> My only comment is that this should be a candidate for Instant
> Classic.
>
> 73's
> Richard Clark, KB7QHC

From snopes.com -

The piece quoted above likely began as a humor post to the newsgroup rec.humor in 1997.
Its roots, however, are far older: an unattributed parody of a scientific proof concluding Heaven was
hotter than Hell appeared in a 1972 edition of Applied Optics, a story found in a 1962 book (reprinted
from a 1960 magazine) is a mathematical "proof" that heaven is hotter than hell, and article
published in a 1979 edition of the Journal of Irreproducible Results written by Dr. Tim Healey (written
as a response to the Applied Optics piece) carried the joke one step farther by arguing that Hell was
hotter still. Though these older pieces don't directly correlate with what has now become a
standardized bit of Internet lore, the themes are similar enough for us to postulate that the older
versions sparked the newer ones.

jk

3818. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 21:01:09 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <pik6d.20929$QJ3.8729@newssvr21.news.prodigy.com>
Source record: 88889

Jack Painter wrote:

> "Richard Clark" <kb7qhc@comcast.net> wrote
> /snip
>
>>fighting cultures. Bush in his flight suit and helmet reminds me of
>>that pathetic picture of Dukakis in the Tank - what a matched pair!
>>
>>73's
>>Richard Clark, KB7QHC
>
>
> Hi Richard, need we point out to you the absurdity of comparison between a
> pretender waving from armor he never saw before in his life, to a qualifed
> USAF jet fighter pilot who gets suited back up for a carrier landing? We can
> find a lot of things to disagree with President Bush's policies about, but
> one thing he is not, is a phony.
>
> 73,
> Jack Painter
> Virginia Beach VA
>
>

I suppose George was born with his Texas sharecropper accent, and
his good, honest, Republican smirk. Give us a break, Jack.
All politicians are phony through and through. Unfortunately,
in George's case, that's all he's got - phoniness.
73,
Tom Donaly, KA6RUH

3819. Re: The Problem of Mixing Religion and Science

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 22:40:10 UTC
From: Wally Gator <me@mycrib.com>
Message-ID: <eLl6d.10780$YI2.6684@fe1.columbus.rr.com>
Source record: 88891

Jim Kelley wrote:

>
> Richard Clark wrote:
>
>>The Thermodynamics of Hell
>>
>>The following is an actual question given on a University of
>>Washington chemistry mid-term. The answer by one student was so
>>"profound" that the professor shared it with colleagues, via the
>>internet which is, of course, why we now have the pleasure of
>>enjoying it as well.
>>
>>Bonus question: Is Hell exothermic (gives off heat)or endothermic
>>(absorbs heat)?
>>
>>Most of the students wrote proofs of their beliefs using Boyle's Law
>>(gas cools when it expands and heats when it is compressed) or some
>>variant. One student wrote the following:
>>
>>"First, we need to know how the mass of Hell is changing in time. So
>>we need to know the rate at which souls are moving into Hell and the
>>rate at which they are leaving. I think that we can safely assume that
>>once a soul gets to Hell, it will not leave. Therefore, no souls are
>>leaving. As for how many souls are entering Hell, let's look at the
>>different religions that exist in the world today. Most of these
>>religions state that if you are not a member of their religion, you
>>will go to Hell. Since there is more than one of these religions and
>>since people do not belong to more than one religion, we can project
>>that all souls go to Hell. With birth and death rates as they are, we
>>can expect the number of souls in Hell to increase exponentially. Now,
>>we look at the rate of change of the volume in Hell because Boyle's
>>Law states that in order for the temperature and pressure in Hell to
>>stay the same, the volume of Hell has to expand proportionately as
>>souls are added.
>>
>>This gives two possibilities:
>>
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>>enter Hell, then the temperature and pressure in Hell will increase
>>until all Hell breaks loose.
>>
>>2. If Hell is expanding at a rate faster than the increase of souls in
>>Hell, then the temperature and pressure will drop until Hell freezes

>>over.
>>
>>So, which is it? If we accept the postulate given to me by Jan during
>>my Freshman year that, " ... it will be a cold day in Hell before I
>>sleep with you," and take into account the fact that I still have not
>>succeeded in having an affair with her, then # 2 above cannot be true,
>>and thus I am sure that Hell is exothermic and will not freeze over."
>>
>>This student received the only "A."
>>
>>**
>>
>>NOTE, the entirety of the material above is not mine, but arrived by
>>email anonymously and unrelated to matters discussed in this group.
>>
>>My only comment is that this should be a candidate for Instant
>>Classic.
>>
>>73's
>>Richard Clark, KB7QHC
>
>
> From snopes.com -
>
> The piece quoted above likely began as a humor post to the newsgroup
> rec.humor in 1997.
> Its roots, however, are far older: an unattributed parody of a
> scientific proof concluding Heaven was
> hotter than Hell appeared in a 1972 edition of Applied Optics, a
> story found in a 1962 book (reprinted
> from a 1960 magazine) is a mathematical "proof" that heaven is
> hotter than hell, and article
> published in a 1979 edition of the Journal of Irreproducible
> Results written by Dr. Tim Healey (written
> as a response to the Applied Optics piece) carried the joke one
> step farther by arguing that Hell was
> hotter still. Though these older pieces don't directly correlate
> with what has now become a
> standardized bit of Internet lore, the themes are similar enough
> for us to postulate that the older
> versions sparked the newer ones.
>
> jk

I bet you're so square, you step out of the shower to pee. :-)
Lighten up brother, it was a funny joke.

3820. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 22:54:22 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <yYl6d.12558$gG4.9543@newsread1.news.pas.earthlink.net>
Source record: 88892

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rnfgl0l13cmmq55fre7gnmjnn9lavdthv0@4ax.com...
> On Tue, 28 Sep 2004 13:52:05 GMT, "John Smith"
> <kd5yikes@mindspring.com> wrote:
>
>>Suppose I construct the antenna as shown except put a Tee at the bottom
>>for
>>convenience. What will be the impedance at that point? After all, that
>>would
>>now be the feed point, yes?
>
> No. The feed point is at the inner conductor connection to the outer
> conductor. The bend in the line (where you would put the tee) is
> merely a bend in the line. You could choose any point in the line,
> would that qualify it as a feed point? No. Your eye is merely drawn
> to it through the magic of an illustration's symmetry. As a practical
> matter, yes you could insert a tee there (provided you open one leg,
> you see? even here we have to maintain the continuity out to the true
> feed point).

I think you misunderstand, but that is most likely because I have a hard time conveying what's in my mind. Especially in print and expecially at my age. I didn't used to have that problem...

I take a half-wave (at 1.0 velocity factor) length of RG58 with a BNC connector on one end and make a hairpin loop. This is the left side of the folded dipole. The BNC connector is at the bottom center. I take another half-wave piece of RG58 with a BNC connector connected to the shield only, and make a hairpin loop for the right side of the folded dipole. Now I install a T at the bottom between the left and right sides. As for the upper element, I attach the center wire of the left half to the shield of the right half. I repeat, the center conductor of the coax on the right side is not used.

Now I have an antenna completely constructed with a feedpoint at the bottom center via the T. What is the impedance at the T?

> I must add that my analysis on the Z transformation may be at fault.
> Again, my focus is in larger antennas where these kind of machinations
> would be prohibitive. Others should have chimed in by now, but they
> seem transfixed with my postings on politics or bored altogether. It
> seems to me that you already have the text description before you.
> Certainly in a 800+ page tome Kraus isn't mute on the subject?

Almost mute, yes. The only discussion for this particular arrangement is beneath the figure where it says "(a) A folded dipole has zero potential at

the midpoint of the lower dipole half at all frequencies. Thus, this point is ideal to attache a coaxial cable."

> On the other hand, you have the instrumentation and the scale of
> construction is not so demanding that you couldn't resolve this
> yourself at the bench in an evening. We have too many dream weavers
> here already and I have pleaded with them to perform simple tests that
> apparently befuddle them. Imagine me posing the task of taking
> several SWR measurements being responded to with 100 posting threads
> of confusion as to how!

I recently got some of the instruments I now have. Owning them, however, does not mean I know what I'm doing with them. This is my first foray into UHF and the instruments and techniques are new to me. Yes, I can handle complex arithmetic, but that doesn't mean I know how to set up a test properly at 440 MHz.

Resolve this in an evening? I first have to learn how to make the measurements with some accuracy and repeatability before I can get meaningful results. At this frequency, I've learned, even getting a true short circuit takes care.

Also, I have nobody to work with me as I try all this new stuff. This group is the only resource I have with people who are knowledgeable enough to answer such questions.

I'm doing the best I can.

73,
John

3821. My Secret Camera 4862 [1/2]

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 23:06:57 UTC
From: qylpov@comcast.net
Message-ID: <200409282205.i8SM5o005315@linux.iafd.com>
Source record: 88890
Cross-posted to: rec.arts.movies.erotica,rec.radio.amateur,rec.radio.amateur.antenna

Hi
I setup a secret camera in my younger sisters bedroom and caught her masterbating,
Downloads here.
xtneqokehbyrgubsrfzjgzioixgwgvtsvztrjlngnylotwwsyooccrtwmfhgzhgctogtsqzpdywtlrxlhz

3822. DILDO FUN 7260 [1/2]

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-28 23:52:47 UTC
From: nwdlkk@comcast.net
Message-ID: <200409282251.i8SMpZt05862@linux.iafd.com>
Source record: 88893
Cross-posted to: rec.arts.movies.erotica,rec.radio.amateur,rec.radio.amateur.antenna

I caught my sister masterbating with a big dildo , you can see her camera pics here.
lwirtmbiseogpwoweeectsrfroqyqhyzsliokoxhvvnimsmvzgiqdsjwfcunsrukbgwc

3823. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could I Make a1/2 Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 00:41:20 UTC
From: John Steffes <jsteffes@cfl.rr.com>
Message-ID: <Qwn6d.58789$uN5.29228@tornado.tampabay.rr.com>
Source record: 88894

Hal,

Your idea using the J-Pole is probabaly the best solution.
1. No radials needed
2. Easy to match using ANY type of feedline
3. Total length is about 3/4 wavelength (about 52") including matching
section
4. Easy to contruct

We found this URL that may give you an idea regarding contruction.

http://w4zt.com/jpole/

John

Hal Rosser wrote:
> If you built a dipole, then it was (most likely) not a quarter-wave - but a
> half-wave
> a j-pole may be a good choice given the situation that it needs to be 'out
> the window' and is uhf
> or, for that matter, a coaxial half-wave dipole. (strip and fold back
> 1/4-wave of braid - and weatherproof it)
>
> "WolfMan" <WMan@W2GLI.com> wrote in message
> news:3_W5d.5585$NS1.2618920@news4.srv.hcvlny.cv.net...
>
>>I'm Limited To An Antenna On The Front Of My House. Out My Window I Made A
>
> Simple !/4 wave Verticle Dipole. Would A 1/2 Wave Simply Be Twice The
> Length, Using 462/f Mhz, And Would There Be An Advantage With A 1/2 Wave
> Over a 1/4 Wave ?
>
>>Thanks
>
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.770 / Virus Database: 517 - Release Date: 9/27/2004
>
>

3824. longer antenna for a Cell phone

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 00:58:15 UTC
From: "Ralph Blach"
Message-ID: <10lk24v1ipnc732@corp.supernews.com>
Source record: 88895

There are companies selling longer antennas for the v400.

Do these longer antennas really help at 1900 and 850 mhz?

Thanks

Chip

3825. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 01:07:31 UTC
From: Tom Ring <news0000@taring.org>
Message-ID: <415a0ad4$0$91012$39cecf19@news.twtelecom.net>
Source record: 88896

Roy Lewallen wrote:
> Thanks for the responses. The suggestions were constructive, and they
> confirmed my observation that some people will do just about anything,
> including newsgroup posting, to avoid looking in the manual.
>
> Roy Lewallen, W7EL

As someone who has done a large amount of software design and implementation with highly varied target audiences, I would suggest that making the design such that minimal need for reference to the manual because of multiple paths to user desired results is something to be looked at seriously. Sorry about the awkward verbage, I'm not sure how to express it elegantly.

tom
K0TAR

3826. Re: Printing wire list from EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 02:37:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <10lk7v0ghnikva7@corp.supernews.com>
Source record: 88897

Tom, you're absolutely right. And the number of times I've been asked this particular question shows that I do need to address the issue being discussed.

But. . .

While there are some standards which can just about universally be agreed on as far as usability and consistency are concerned, there are vast differences in opionion about how a large number of features should be handled. An interface that's intuitive to one person is hopelessly awkward to another. I know this for a fact, since I get comments clear across the spectrum about the program and its interface. During product development, I often ask the beta testers to choose among two or more ways of implementing a feature, and seldom get unanimity. Two things I've learned in this very interesting endeavor are: 1. Avoid making changes or implementing features to please one or a small number of people. 2. You can't please everyone. Considering the complexity of the program, it's a certainty that everyone can find something he doesn't like.

Complaints like Chuck's would bother me if it weren't for the very large number of positive comments I receive, the amateurs and professional customers who continue to purchase upgrades, and the commercial customers who keep buying more and more copies. Complaints and negative comments aren't to be ignored by any means, but the positive feedback keeps them in context. Anyone who does buy the program gets a fast and complete refund if not fully satisfied (although, ironically, they might not know that if they're unwilling to open the manual) -- there's simply no way to get a bad deal and no excuse to feel cheated. The demo program is exactly like the full program with the single exception of the segment limit, and includes the full manual, so anyone can see exactly what the program is like before they buy it. Those who don't like it hopefully won't buy it.

It is indeed my goal to make the program operable without any reference to the manual. A secondary goal is to make the manual as complete as possible, so a user can easily find out how to do something that isn't immediately obvious (remembering that what's obvious to one person is often obtuse to another). I'll never fully meet both goals, but I do keep trying. And I appreciate the suggestions and comments.

Roy Lewallen, W7EL

Tom Ring wrote:
> Roy Lewallen wrote:
>
>> Thanks for the responses. The suggestions were constructive, and they

>> confirmed my observation that some people will do just about anything,
>> including newsgroup posting, to avoid looking in the manual.
>>
>> Roy Lewallen, W7EL
>
>
> As someone who has done a large amount of software design and
> implementation with highly varied target audiences, I would suggest that
> making the design such that minimal need for reference to the manual
> because of multiple paths to user desired results is something to be
> looked at seriously. Sorry about the awkward verbage, I'm not sure how
> to express it elegantly.
>
> tom
> K0TAR

3827. Re: The Problem of Mixing Religion and Science

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 02:38:22 UTC
From: Jack Painter <223bthp@cox.net>
Message-ID: <zep6d.5984$%t3.1740@lakeread01>
Source record: 88898

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:63ogl054pi3kra4vij6n2anhdjjp19l7le@4ax.com...
> The Thermodynamics of Hell
>
> The following is an actual question given on a University of
> Washington chemistry mid-term. The answer by one student was so
> "profound" that the professor shared it with colleagues, via the
> internet which is, of course, why we now have the pleasure of
> enjoying it as well.
>
> Bonus question: Is Hell exothermic (gives off heat)or endothermic
> (absorbs heat)?
>
> Most of the students wrote proofs of their beliefs using Boyle's Law
> (gas cools when it expands and heats when it is compressed) or some
> variant. One student wrote the following:
>
> "First, we need to know how the mass of Hell is changing in time. So
> we need to know the rate at which souls are moving into Hell and the
> rate at which they are leaving. I think that we can safely assume that
> once a soul gets to Hell, it will not leave. Therefore, no souls are
> leaving. As for how many souls are entering Hell, let's look at the
> different religions that exist in the world today. Most of these
> religions state that if you are not a member of their religion, you
> will go to Hell. Since there is more than one of these religions and
> since people do not belong to more than one religion, we can project
> that all souls go to Hell. With birth and death rates as they are, we
> can expect the number of souls in Hell to increase exponentially. Now,
> we look at the rate of change of the volume in Hell because Boyle's
> Law states that in order for the temperature and pressure in Hell to
> stay the same, the volume of Hell has to expand proportionately as
> souls are added.
>
> This gives two possibilities:
>
> 1. If Hell is expanding at a slower rate than the rate at which souls
> enter Hell, then the temperature and pressure in Hell will increase
> until all Hell breaks loose.
>
> 2. If Hell is expanding at a rate faster than the increase of souls in
> Hell, then the temperature and pressure will drop until Hell freezes
> over.
>
> So, which is it? If we accept the postulate given to me by Jan during

> my Freshman year that, " ... it will be a cold day in Hell before I
> sleep with you," and take into account the fact that I still have not
> succeeded in having an affair with her, then # 2 above cannot be true,
> and thus I am sure that Hell is exothermic and will not freeze over."
>
> This student received the only "A."
>
> **********
>
> NOTE, the entirety of the material above is not mine, but arrived by
> email anonymously and unrelated to matters discussed in this group.
>
> My only comment is that this should be a candidate for Instant
> Classic.
>
> 73's
> Richard Clark, KB7QHC

It is a bullshit-classic. From 9th Grade Chemistry of many years ago.

Jack

3828. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 03:48:59 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040928234859.25615.00001230@mb-m17.aol.com>
Source record: 88899

We do not pray to the same God. Islam is based on the blending of tribal religions and misunderstandings of Christianity and Judism. The god of Islam is more along the lines of the Arabic moon god, Allah, not the God of Christianity.

Randy

3829. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 03:50:16 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040928235016.25615.00001231@mb-m17.aol.com>
Source record: 88900

Oh I forgot, Islam recognizes Jesus as another prophet with Mohammed being the last and greatest. Islam does not recognize that Jesus is the Son of God, and is indeed God.

Randy

3830. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 04:04:32 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040929000432.25615.00001234@mb-m17.aol.com>
Source record: 88901

Chuck,

Reread my post. I said that Islam and Hinduism both practice religious discrimination. In fact Islam is monthiestic will Hindi's are polytheistic.

As you posted, religious liberty includes the right not to practice. But religious liberty also includes my right to vote based on religious beliefs, to work as a minister seeking to help mankind, and even evangelise and pass out information in public forums.

Of the 13 colonies that were founded for religious freedom, I can think of Mass., Rhode Island, New Jersey, Pennsylvania, and Maryland. 5 out of 13. Several other colonies offered freedom from religious discrimination.

Randy

3831. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 04:15:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <987kl0t7qr3q2fc0tf2dgofmpeosajj6fq@4ax.com>
Source record: 88902

On Tue, 28 Sep 2004 22:54:22 GMT, "John Smith"
<kd5yikes@mindspring.com> wrote:
>I think you misunderstand, but that is most likely because I have a hard
>time conveying what's in my mind. Especially in print and expecially at my
>age. I didn't used to have that problem...

Hi John,

I understood you, the illustration is sufficient.

>I take a half-wave (at 1.0 velocity factor) length of RG58 with a BNC
>connector on one end and make a hairpin loop. This is the left side of the
>folded dipole. The BNC connector is at the bottom center. I take another
>half-wave piece of RG58 with a BNC connector connected to the shield only,
>and make a hairpin loop for the right side of the folded dipole. Now I
>install a T at the bottom between the left and right sides. As for the upper
>element, I attach the center wire of the left half to the shield of the
>right half. I repeat, the center conductor of the coax on the right side is
>not used.

This is as it should be - for a folded halfwave dipole. However,
there is some question that this is intention of the design expressed
with great paucity of facts by Kraus. More on this below.

>Now I have an antenna completely constructed with a feedpoint at the bottom
>center via the T. What is the impedance at the T?

It will be the transform of that load found at the opposite side where
the signal is developed by the connection of the inner conductor to
the outer shield. More on this below.

>Almost mute, yes. The only discussion for this particular arrangement is
>beneath the figure where it says "(a) A folded dipole has zero potential at
>the midpoint of the lower dipole half at all frequencies. Thus, this point
>is ideal to attache a coaxial cable."

More useful is it can be attached to a metal support without
interfering.

>I recently got some of the instruments I now have. Owning them, however,
>does not mean I know what I'm doing with them. This is my first foray into
>UHF and the instruments and techniques are new to me. Yes, I can handle
>complex arithmetic, but that doesn't mean I know how to set up a test
>properly at 440 MHz.

You need to add a directional coupler to separate out the forward and
reverse components is all.

>Resolve this in an evening? I first have to learn how to make the
>measurements with some accuracy and repeatability before I can get
>meaningful results. At this frequency, I've learned, even getting a true
>short circuit takes care.

Do you have a manual? I've been trying to find a link to HP manuals
that was offered in this group in the last couple of months. The "App
Notes" written during the 60s offer a complete education without
requiring a double-E to understand.

>Also, I have nobody to work with me as I try all this new stuff. This group
>is the only resource I have with people who are knowledgeable enough to
>answer such questions.
>
>I'm doing the best I can.

You'll get there, by and by.

73's
Richard Clark, KB7QHC

3832. Re: Transformer for longwire antennas to reduce noise problem?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 04:43:02 UTC
From: Larry Weil <kc1ih@mac.com>
Message-ID: <kc1ih-024067.00430229092004@news.supernews.com>
Source record: 88903
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.antenna

In article <45cc755c.0409261355.67a5a37f@posting.google.com>,
micropower_fm@hotmail.com (TheGnome) wrote:

> I was thinking about adding one of those 9:1 transformers or other
> impedance matching things for longwires; would this reduce the noise
> problem I'm having? Any other tips for reducing longwire noise? It
> works enough, but I know I can do better...

I had a noise problem with a longwire. I got a 4:1 balun from LDG, it's meant to be used with their autotuners, bit also can be used by itself.

On the high impedance side of the balun, one side goes to the antenna, and the other side to ground. You then use coax to connect to your receiver. I mounted the balun on the wall right where the antenna leaves the house, and connected the ground terminal to a ground rod directly below that point.

The reduction in noise was dramatic! This tells me that what you propose should work for you, as long as you can connect one side of the high-impedance side to a good ground. In a dorm room, I don't know if you have a decent RF ground available, depends on the circumstances of the plumbing, etc.

If the balun is not too expensive, it is probably worth your while to get one and to experiment. Try yo buy one from a place with a liberal return policy, in case it does not work for you.

Good luck!

73 de KC1IH

--
Larry Weil
Lake Wobegone, NH

3833. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 05:31:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u8hkl05tu930hgk9fum5n3cp9lhfql1cns@4ax.com>
Source record: 88904

On Wed, 29 Sep 2004 04:15:57 GMT, Richard Clark <kb7qhc@comcast.net>
wrote:

>More on this below.

It seems in my effort to find the page(s) associated with HP and your equipment, I forgot to expand on the issues promised.

The antenna is generally known as a "shielded, balanced dipole." This is often applied to receive applications. For the dimensions you suggest (halfwave overall length), the Z multiplication would indeed present a 6:1 mismatch - on average.

To answer your question about what Z would be present at the "feed point": it would fall along the circumference of a constant SWR 6:1 circle (speaking of a Smith Chart solution) depending upon the length of the electrical distance to the true feed point. This will be greater than the halfwave of the antenna structure given that its electrical length is not confounded by insulation properties.

I have seen this design used for repeaters, but in a 4 bay configuration. Undoubtedly the harness feeding it was composed of halfwave sections placed in parallel to draw down the mismatch (at least it acted like this, the wiring was hidden within the greater supporting structure).

73's
Richard Clark, KB7QHC

3834. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 05:42:53 UTC
From: "p.paulfriedman" <p.paulfriedman@comcast.net>
Message-ID: <xXr6d.136623$D%.119377@attbi_s51>
Source record: 88905

"Theplanters95" <theplanters95@aol.comnospam> wrote in message
news:20040929000432.25615.00001234@mb-m17.aol.com...
> Chuck,
>
> Reread my post. I said that Islam and Hinduism both practice religious
> discrimination. In fact Islam is monthiestic will Hindi's are
> polytheistic.
>
> As you posted, religious liberty includes the right not to practice. But
> religious liberty also includes my right to vote based on religious
> beliefs, to
> work as a minister seeking to help mankind, and even evangelise and pass
> out
> information in public forums.
>
> Of the 13 colonies that were founded for religious freedom, I can think
> of
> Mass., Rhode Island, New Jersey, Pennsylvania, and Maryland. 5 out of 13.
> Several other colonies offered freedom from religious discrimination.
>
> Randy

Massachusetts was hardly "founded for religious freedom." It was founded by true believers who had The Answer. Escaping persecution doesn't mean one won't practice it when in power.

A strong case can be made that Hinduism is basically monotheistic -- as with many/most religions (Rabbinical Judaism and Islam excepted) the popular beliefs tend toward polytheism (e.g., Christian trinity, saints and he semi-deification of Mary).

While "work as a minister seeking to help mankind" might not be technically oxymoronic it is not more meaningful than "work as a garbage collector (or even, gasp, an EE) to help mankind."

Paul

3835. Re: NEED INFOS TO MAKE A WINDOM ANTENNA (FD4)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 05:54:51 UTC
From: Ron <pantau@planet-interkom.de>
Message-ID: <415A4E2B.4030707@planet-interkom.de>
Source record: 88906

hello,

13,5m; 27,5M and a 1:6 balun.
vy 73 de Ron DG1HVW

F4ATM Laurent schrieb:
> Hello,
> i need all lenghts of wires and balun type (1/6 or 1/4)to make a
> Windom antenna 10m to 80m.
> My maximal lenght for the 2/3 wire is 24m maxi, i have no mutch place
> in my little garden ...
> Please send me schematics or infos by mail to f4atm@wanadoo.fr
> Thanks in advance for reply.
> 73
> F4ATM Laurent

3836. Re: The Problem of Mixing Religion and Science

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 12:48:43 UTC
From: "H. Adam Stevens, NQ5H" <NQ5H@ARRL.net>
Message-ID: <Lay6d.13121$gG4.4983@newsread1.news.pas.earthlink.net>
Source record: 88907

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:4159CFB4.D9B2309D@uci.edu...
>
>
> Richard Clark wrote:
>>
>> The Thermodynamics of Hell
>>
>> The following is an actual question given on a University of
>> Washington chemistry mid-term. The answer by one student was so
>> "profound" that the professor shared it with colleagues, via the
>> internet which is, of course, why we now have the pleasure of
>> enjoying it as well.
>>
>> Bonus question: Is Hell exothermic (gives off heat)or endothermic
>> (absorbs heat)?
>>
>> Most of the students wrote proofs of their beliefs using Boyle's Law
>> (gas cools when it expands and heats when it is compressed) or some
>> variant. One student wrote the following:
>>
>> "First, we need to know how the mass of Hell is changing in time. So
>> we need to know the rate at which souls are moving into Hell and the
>> rate at which they are leaving. I think that we can safely assume that
>> once a soul gets to Hell, it will not leave. Therefore, no souls are
>> leaving. As for how many souls are entering Hell, let's look at the
>> different religions that exist in the world today. Most of these
>> religions state that if you are not a member of their religion, you
>> will go to Hell. Since there is more than one of these religions and
>> since people do not belong to more than one religion, we can project
>> that all souls go to Hell. With birth and death rates as they are, we
>> can expect the number of souls in Hell to increase exponentially. Now,
>> we look at the rate of change of the volume in Hell because Boyle's
>> Law states that in order for the temperature and pressure in Hell to
>> stay the same, the volume of Hell has to expand proportionately as
>> souls are added.
>>
>> This gives two possibilities:
>>
>> 1. If Hell is expanding at a slower rate than the rate at which souls
>> enter Hell, then the temperature and pressure in Hell will increase
>> until all Hell breaks loose.
>>
>> 2. If Hell is expanding at a rate faster than the increase of souls in

>> Hell, then the temperature and pressure will drop until Hell freezes
>> over.
>>
>> So, which is it? If we accept the postulate given to me by Jan during
>> my Freshman year that, " ... it will be a cold day in Hell before I
>> sleep with you," and take into account the fact that I still have not
>> succeeded in having an affair with her, then # 2 above cannot be true,
>> and thus I am sure that Hell is exothermic and will not freeze over."
>>
>> This student received the only "A."
>>
>> **********
>>
>> NOTE, the entirety of the material above is not mine, but arrived by
>> email anonymously and unrelated to matters discussed in this group.
>>
>> My only comment is that this should be a candidate for Instant
>> Classic.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> From snopes.com -
>
> The piece quoted above likely began as a humor post to the newsgroup
> rec.humor in 1997.
> Its roots, however, are far older: an unattributed parody of a
> scientific proof concluding Heaven was
> hotter than Hell appeared in a 1972 edition of Applied Optics, a
> story found in a 1962 book (reprinted
> from a 1960 magazine) is a mathematical "proof" that heaven is
> hotter than hell, and article
> published in a 1979 edition of the Journal of Irreproducible
> Results written by Dr. Tim Healey (written
> as a response to the Applied Optics piece) carried the joke one
> step farther by arguing that Hell was
> hotter still. Though these older pieces don't directly correlate
> with what has now become a
> standardized bit of Internet lore, the themes are similar enough
> for us to postulate that the older
> versions sparked the newer ones.
>
> jk
I read it in the 60's in the Journal of Psychedelic Drugs
73
H.

3837. Re: Newbie ?: I've Built A Simple 1/4 Wave Dipole for 2 Mtrs. Could I Make a1/2 Wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 16:43:51 UTC
From: Jimmie <Gfender@carolina.rr.com>
Message-ID: <bDB6d.17010$n%3.2294885@twister.southeast.rr.com>
Source record: 88908

Stay away from the coaxial dipoles. They are junk. The vynil used on the
ouside of coax is unsuitabe for use as the dielectric of an antenna element.
While there are good ways of making this antenna the 'strip the coax and
fold back the sheild' method is not one of them.

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:2O46d.75338$zT6.69472@bignews5.bellsouth.net...
> If you built a dipole, then it was (most likely) not a quarter-wave - but
a
> half-wave
> a j-pole may be a good choice given the situation that it needs to be 'out
> the window' and is uhf
> or, for that matter, a coaxial half-wave dipole. (strip and fold back
> 1/4-wave of braid - and weatherproof it)
>
> "WolfMan" <WMan@W2GLI.com> wrote in message
> news:3_W5d.5585$NS1.2618920@news4.srv.hcvlny.cv.net...
> > I'm Limited To An Antenna On The Front Of My House. Out My Window I Made
A
> Simple !/4 wave Verticle Dipole. Would A 1/2 Wave Simply Be Twice The
> Length, Using 462/f Mhz, And Would There Be An Advantage With A 1/2 Wave
> Over a 1/4 Wave ?
> > Thanks
>
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.770 / Virus Database: 517 - Release Date: 9/27/2004
>
>

3838. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 16:47:19 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <rGB6d.4263$nj.2215@newssvr13.news.prodigy.com>
Source record: 88909

p.paulfriedman wrote:
> "Theplanters95" <theplanters95@aol.comnospam> wrote in message
> news:20040929000432.25615.00001234@mb-m17.aol.com...
>
>>Chuck,
>>
>>Reread my post. I said that Islam and Hinduism both practice religious
>>discrimination. In fact Islam is monthiestic will Hindi's are
>>polytheistic.
>>
>>As you posted, religious liberty includes the right not to practice. But
>>religious liberty also includes my right to vote based on religious
>>beliefs, to
>>work as a minister seeking to help mankind, and even evangelise and pass
>>out
>>information in public forums.
>>
>>Of the 13 colonies that were founded for religious freedom, I can think
>>of
>>Mass., Rhode Island, New Jersey, Pennsylvania, and Maryland. 5 out of 13.
>>Several other colonies offered freedom from religious discrimination.
>>
>>Randy
>
>
> Massachusetts was hardly "founded for religious freedom." It was founded by
> true believers who had The Answer. Escaping persecution doesn't mean one
> won't practice it when in power.
>
> A strong case can be made that Hinduism is basically monotheistic -- as with
> many/most religions (Rabbinical Judaism and Islam excepted) the popular
> beliefs tend toward polytheism (e.g., Christian trinity, saints and he
> semi-deification of Mary).
>
> While "work as a minister seeking to help mankind" might not be technically
> oxymoronic it is not more meaningful than "work as a garbage collector (or
> even, gasp, an EE) to help mankind."
>
> Paul
>
>

Most of the hick preachers I've known have spent more time
helping themselves to their followers money than helping mankind.

73,
Tom Donaly, KA6RUH

3839. Re: Picture of antenna with natural balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 17:11:12 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <Q0C6d.13259$gG4.11032@newsread1.news.pas.earthlink.net>
Source record: 88910

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:u8hkl05tu930hgk9fum5n3cp9lhfql1cns@4ax.com...
> On Wed, 29 Sep 2004 04:15:57 GMT, Richard Clark <kb7qhc@comcast.net>
> wrote:
>
>>More on this below.
>
> It seems in my effort to find the page(s) associated with HP and your
> equipment, I forgot to expand on the issues promised.
>
> The antenna is generally known as a "shielded, balanced dipole." This
> is often applied to receive applications. For the dimensions you
> suggest (halfwave overall length), the Z multiplication would indeed
> present a 6:1 mismatch - on average.
>
> To answer your question about what Z would be present at the "feed
> point": it would fall along the circumference of a constant SWR 6:1
> circle (speaking of a Smith Chart solution) depending upon the length
> of the electrical distance to the true feed point. This will be
> greater than the halfwave of the antenna structure given that its
> electrical length is not confounded by insulation properties.
>
> I have seen this design used for repeaters, but in a 4 bay
> configuration. Undoubtedly the harness feeding it was composed of
> halfwave sections placed in parallel to draw down the mismatch (at
> least it acted like this, the wiring was hidden within the greater
> supporting structure).
>
> 73's
> Richard Clark, KB7QHC

Thanks, Richard.

John

3840. Re: longer antenna for a Cell phone

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 21:52:21 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <p8G6d.7457$Ki1.340@newsread2.news.atl.earthlink.net>
Source record: 88911

"Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
news:10lk24v1ipnc732@corp.supernews.com...
> There are companies selling longer antennas for the v400.
>
> Do these longer antennas really help at 1900 and 850 mhz?
>

It may depend on the antenna. If they are made correctly longer antennas
will have more gain. If not made correctly they may not have any more gain
and may have less.

3841. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 22:05:21 UTC
From: k7itm@aol.com
Message-ID: <3200347.0409291405.4548356c@posting.google.com>
Source record: 88912

"John Smith" <kd5yikes@mindspring.com> wrote in message
news:<cj9i9j028eg@enews3.newsguy.com>...
>...
> Thanks for that info, Tom.
>
> If resonance is not necessary, then I need only one turn of .75 diameter to
> make sure resonance is higher than my operating frequency. That would make
> the coil with parasitic capacitance look inductive.

??? A single turn 3/4" diameter won't give you much reactance at 440.
Looks to me like if you used about three turns with that ID with a
total length around 1.5 inches, you'd be a lot better off. That'll be
about 300 ohms inductive reactance, shunted by enough parasitic
capacitance to come close to resonance (thus a higher net reactance).

Cheers,
Tom

3842. FS: Andrews LDF4-50 & LDF 5-50 at Leicester Show

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 22:44:49 UTC
From: Peter <peter@NOSPAMwires.ndo.co.uk>
Message-ID: <cjfdsqdlq2@news5.svr.pol.co.uk>
Source record: 88913
Cross-posted to: rec.radio.amateur.antenna,uk.radio.amateur

For sale and collection at Leicester Show sat Oct 2nd:

Andrews LDF4-50
Length Qty available Price each GBP
10m 1 10
16m 3 16
17m 2 17
21m 4 25
6m lots!! 3 Easily formed mag
loops????

Andrews LDF 5-50
Length Qty available Price each GBP
21.5 1 30

Sorry no connectors!!!!!
Mail off group to reserve cable and arrange mutually convenient collection
time.

Cheers
Peter
--
To reply remove the obvious spam trap.....

3843. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 22:55:39 UTC
From: microwaves@blueyonder.co.uk
Message-ID: <415b3d1e.52112313@news.blueyonder.co.uk>
Source record: 88914

On Wed, 29 Sep 2004 16:47:19 GMT, "Tom Donaly"
<dtdonaly@sbcglobal.net> wrote:

>Most of the hick preachers I've known have spent more time
>helping themselves to their followers money than helping mankind.
>73,
>Tom Donaly, KA6RUH

Just watch the God Channel on Sat TV ... that's some big business!

3844. FS: Andrews LDF 4-50 & LDF 5-50 at Leicester Show

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 22:58:28 UTC
From: Peter <peter@NOSPAMwires.ndo.co.uk>
Message-ID: <cjfemc$3g3$6@news6.svr.pol.co.uk>
Source record: 88915
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Available Saturday Oct 2 at Leicester Amateur Radio Show:-

Andrews LDF 4-50 coax
Lengths Qty available Price each GBP
16 m 3 16
17 m 2 17
21m 4 25
6m Lots! 3 Mag loops anyone??

Andrews LDF 5-50 coax
Lengths Qty available Price GBP
21.5 1 30

Sorry no connectors!!!

Mail off group to reserve & arrange mutually convenient collection
Cheers
Peter

To reply remove the obvious spam trap.....

3845. Re: Rohn tower as vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 23:11:09 UTC
From: jgboyles@aol.com
Message-ID: <20040929191109.03437.00000809@mb-m27.aol.com>
Source record: 88916

>To make a long story short, I will be moving my beam to another
>tower, and will have a rohn 25g tower that is imbedded in concrete
>approximately 50 feet away from the house. I would like to get a
>decent lower band antenna (not 160). I'm wondering what would be the
>best scenario:

Hi Terry, My suggestion would be extend the tower as high as possible, and hang a 135' inverted vee, fed with open wire line. Of course you will have to use an antenna tuner and balun at the shack, but this antenna will work will work really well on your bands of interest. This would be a "best all around" antenna.
If your interest is solely dx, then a vertical or inverted "L" with lots of radials should be the way to go. The radials are a pain, compared to the ease of the vee mentioned above.

73 Gary N4AST

3846. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 23:12:18 UTC
From: Dogs - nothing but dogs !! <I_guess_not2087@Hotmail.com>
Message-ID: <415b4152@post.usenet.com>
Source record: 88917

**** Post for FREE via your newsreader at post.usenet.com ****

Another three days passes...

"Dog - nothing but dogs !!" had inquired of W1XYZ:
> Can you please confirm exactly when (year) you
> achived an actual physical embodiment of a
> functioning carbon nanotube antenna with
> dimensions corresponding to visible light?
> ... If you can do that, then I'll award you the
> 'mythical $50k' and admit defeat. ...
> I appreciate your posting and I look forward
> to seeing your next.

And:
> I'm still awaiting further links that he or his
> company actual beat the other team [per
> CNN news].

Did I miss a reply? So, now that all the 'barking of the harbour seals' has died down, we're right back to the starting point - that is that the CNN news was in fact new news (not old news). All I'm seeking is a firm conclusion to all the red herrings and (apparently) false leads to prior art. It's *really* difficult to prove a negative. But I'll inductively conclude that it has been proven.

-=-=-=

3847. Re: longer antenna for a Cell phone

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 23:27:03 UTC
From: Uncle Peter <radioconnectionNO@cox.netSPAM>
Message-ID: <8xH6d.1581$uY3.1347@fed1read03>
Source record: 88918

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:p8G6d.7457$Ki1.340@newsread2.news.atl.earthlink.net...
>
> "Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
> news:10lk24v1ipnc732@corp.supernews.com...
> > There are companies selling longer antennas for the v400.
> >
> > Do these longer antennas really help at 1900 and 850 mhz?
> >
>
> It may depend on the antenna. If they are made correctly longer antennas
> will have more gain. If not made correctly they may not have any more
gain
> and may have less.
>
>
gain is had by reducing gain in other directions. There is nothing to
guarantee that using a gain antenna will cause an improvement;
the opposite may happen. Especially if the antenna is tilted.

3848. Re: Coiled coax balun

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 23:31:17 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <9BH6d.2345$Yr.1597@newsread3.news.pas.earthlink.net>
Source record: 88919

"Tom Bruhns" <k7itm@aol.com> wrote in message
news:3200347.0409291405.4548356c@posting.google.com...
> "John Smith" <kd5yikes@mindspring.com> wrote in message
> news:<cj9i9j028eg@enews3.newsguy.com>...
>>...
>> Thanks for that info, Tom.
>>
>> If resonance is not necessary, then I need only one turn of .75 diameter
>> to
>> make sure resonance is higher than my operating frequency. That would
>> make
>> the coil with parasitic capacitance look inductive.
>
> ??? A single turn 3/4" diameter won't give you much reactance at 440.
> Looks to me like if you used about three turns with that ID with a
> total length around 1.5 inches, you'd be a lot better off. That'll be
> about 300 ohms inductive reactance, shunted by enough parasitic
> capacitance to come close to resonance (thus a higher net reactance).
>
> Cheers,
> Tom

Actually, Tom, my GDO measures about 440 with two tight turns. Add a couple of inches for leads and it goes lower. So, I figured I needed something slightly higher in resonance to be sure it is on the inductive side of 440.

No?

John

3849. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-29 23:56:37 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <H%H6d.18159$3n.16831@okepread06>
Source record: 88920

Theplanters95 <theplanters95@aol.comnospam> wrote in message
news:20040929000432.25615.00001234@mb-m17.aol.com...
> Chuck,
>
> Reread my post. I said that Islam and Hinduism both practice religious
> discrimination. In fact Islam is monthiestic will Hindi's are polytheistic.

Well, actually, the Hundu religion is
monotheistic as well: many sub-deities, but
only one God.

Modern Christianity has many sub-deities
as well, only they are called angels.

The Hundu God is a loving god, as that of
the Christ, not warlike like the god of
Abraham which faux-Christians worship
today.

In any case, I took issue with your notion
of discrimination... perhaps you should
re-read my post.

>
> As you posted, religious liberty includes the right not to practice. But
> religious liberty also includes my right to vote based on religious beliefs, to
> work as a minister seeking to help mankind, and even evangelise and pass out
> information in public forums.

Yes, you can vote any way you wish, but if
your church holds a non-profit status, then
passing out political fliers is illegal, since this
makes your church a political orginization,
subject to taxation.

You do not have a right to be a criminal,
nor is it ethical (or honest) to usurp the
intent or spirit of that law.

If you really want to help mankind, then
mind your own business (worry about
'saving' yourself, not others) since
historically, religion has been responsible
for most wars, oppression, and human
misery!

>
> Of the 13 colonies that were founded for religious freedom, I can think of
> Mass., Rhode Island, New Jersey, Pennsylvania, and Maryland. 5 out of 13.
> Several other colonies offered freedom from religious discrimination.
>

Folks left Europe for the 'New World' mainly
to get away religious oppression - similar to
what we can expect from perverted cults like
your power hungry Pat Robertson's coalition.
You can Justify your actions by any number
of historical revisions, but the fact remains;
America was founded as a secular nation and
religion has no role to play in its government.

Now, if a bunch of crazy Mullah's were to take
your position - wishing to influence government
policy - your position would take a 180° turn in
NY minute... flip-flop!

Chuck, WA7RAI

> Randy

3850. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 00:03:29 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <H%H6d.18160$3n.2420@okepread06>
Source record: 88921

Peter <microwaves@blueyonder.co.uk> wrote in message
news:415b3d1e.52112313@news.blueyonder.co.uk...
> On Wed, 29 Sep 2004 16:47:19 GMT, "Tom Donaly"
> <dtdonaly@sbcglobal.net> wrote:
>
> >Most of the hick preachers I've known have spent more time
> >helping themselves to their followers money than helping mankind.
> >73,
> >Tom Donaly, KA6RUH
>
>
> Just watch the God Channel on Sat TV ... that's some big business!
>

Tom,

I just read where Trinity Broadcasting is
undergoing an audit... seems the big cheese
there is living a lifestyle way too opulent
for his salary... ;)

Chuck, WA7RAI

3851. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 00:05:48 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <I%H6d.18161$3n.3614@okepread06>
Source record: 88922

Theplanters95 <theplanters95@aol.comnospam> wrote in message
news:20040928235016.25615.00001231@mb-m17.aol.com...
> Oh I forgot, Islam recognizes Jesus as another prophet with Mohammed being the
> last and greatest. Islam does not recognize that Jesus is the Son of God, and
> is indeed God.
>
> Randy

Are you saying Jesus created the Universe
and the laws of physics?

Chuck, WA7RAI

3852. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 01:25:46 UTC
From: "aunwin@insightbb.com"
Message-ID: <ugJ6d.284179$mD.1035@attbi_s02>
Source record: 88923

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:25113-41564EB7-208@storefull-3255.bay.webtv.net...
> Reg, G4FGQ wrote:
> "Just another Foreigner without a vote in the forthcoming presidential
> election. But which affects me nevertheless."
>
snip.
>
> Twice in the 20th Century, the U.S.A. answered desparate calls from
> Britain and France to send Germany and its allies back to their homes.
>
snip.
Nor, was it the U.S.A. which partitioned
> Palestine. Nor, was it the U.S.A. which promised the Jews a homeland if
> they would only support the Allied Cause in both world wars..
>
> Best regards, Richard Harrison, KB5WZI
>

Yes,G.B. should be kicked in the butt in declaring war when they were so
broke.
If the jews were not willing to react to Germany then the British should
have stayed put
just like the U.S. as there were no allies at the time, the British were
alone!
If things had happened that way then there would have no been reason
to have an Israel. If there was not an Israel the World would still be
united and the U.N.
would not be torn apart by the U.S. vetoes.
Parts of the World also would not have created a war
against Islam and thousands would still be alive.
If there was no war in Europe maybe the U.S. would have asked for help
against the
' pre emptive' attack, a type of attack that is now the norm.
Richard you have provided good food for thought, something like 'if a nail
was not lost
then a shoe would not have been lost ! '
Obviously the Britts were dummies in fighting those wars
, especially when Israel then turned on the U.K. and other countries
on a killing spree at home and abroard.....Yes it is all Britain's
fault

Not sure if the U.S. would have entered the war
if it wasn't for Japan but if G.B. told the Jewish bankers where to stick
their 40 pieces of silver

we would not now be at war against Islam and parts of the World where Islam is accepted and we
all would have been much happier .
O if we all had the benefit of hindsight the World would be a more peaceful place.

Art

3853. Checking antenna traps

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 04:33:55 UTC
From: Kirk Mohror <kmohror@comcast.net>
Message-ID: <8JCdnbo3TbY5EcbcRVn-sQ@comcast.com>
Source record: 88924

I have an Hy Gain, tri band, 3 element beam antenna. The previous owner said that it would not load up on 15 meters. How do you check the traps on such an antenna before putting it up?

Thanks,
K7EKM

3854. Re: Making a simple antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 04:51:24 UTC
From: harshana@sumuthu.lk
Message-ID: <b2defa30.0409292051.7646c84e@posting.google.com>
Source record: 88925

harshana@sumuthu.lk (Harshana) wrote in message
news:<b2defa30.0409230347.5e754d0d@posting.google.com>...
> Hi all,
>
> I want to make a simple antenna like the ones U see in cheap remote
> control toys. Can anyone give me a eqation that helps me to get the
> wire length when the freq. is given (I'm looking at freqs like 400MHz
> ~ 900MHz)?
>
> Thanks in advance,
> 73,
> Harshana
>
> PS: I don't have amature radio license, but my brother - 4S7NR had.
> Unfortunately he had to leave us (he was shot in Iraq while working
> for ICRC in July 2003).

Hi all,

Thanks for all the replies that shows how to make a small antenna. I had no intention to start a political war in this mailing group. I was just thinking, if my brother was here, I wan't be asking simple question like this in a forum. However, the bottom line is WAR is no good! irrespective of who started it. 90% of the time, its the third party who suffers the most.

Harshana

3855. Re: longer antenna for a Cell phone

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 07:31:07 UTC
From: Bob Bob <bcnntp@optusnet.com.au>
Message-ID: <saps22-qvc.ln1@p400bob.lse.com.au>
Source record: 88927

This actually begs another question.

How efficient compared to (say) a 1/2 wave dopole is the average cell phone antenna? I'd also like to know the difference between those handsets that have a antenna sticking out better or worse (dB pls) than those that dont.

I guess body attenuation wd be a major factor too.

Cheers Bob

Uncle Peter wrote:
> "Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
> news:p8G6d.7457$Ki1.340@newsread2.news.atl.earthlink.net...
>
>>"Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
>>news:10lk24v1ipnc732@corp.supernews.com...
>>

3856. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 07:38:56 UTC
From: theplanters95@aol.comnospam
Message-ID: <20040930033856.18603.00001751@mb-m07.aol.com>
Source record: 88926

Chuck, et al:

Yes, Jesus created the laws of physics and created the universe. I can hear it now, Creation vs Intellegent Design vs Evolution. 3 seperate ideas.. That is a Off Topic and Off List question.

How can you say Hinduism is a peaceful monotheistic religion? One of the major goddess is Shiva. Or what about Krishnia? They have hundreds of gods and goddess. In may parts of India, it is illegal to convert from Hinduism to another religion, often punished by torture and/or death. The Caste system and the Law of Karma is one of the major discriminators in the world.

The trinity is 1 God in three persons. As a Baptist, we do not diefy Mary the mother of Jesus nor worship the "Saints". The God of Abraham in the OT is the same God of the NT. God the father, God the Son (Jesus) and the Holy Spirit is one God in 3 essences. Sort of like a man being a husband, father and brother - three distinct roles, but one person. Angels are created beings, not to be worshipped or diefied as a God. May I suggest you read some of the historic creeds and confessions of faith, such as the Apostle Creed, Nicine Creed, The London Confession, and the Southern Baptist Statement of faith? This will help you better understand the main doctrines of Christianity verses some of the strange teachings seen on Trinity.

On the political side, when people ask or talk politics to me, I tell them that the Bible tells us to pray for the kings over us. Since USA does not have a king, the principle to be applied is pray for our Government leaders, starting with our local leaders, and pray for Kerry and Bush, or Bush and Kerry. The Bible also tells us to be good citizens, so please go vote. As you can see, I endorse no candiate or party. Even though position papers and voter guides (if they do not endorse any person or party) are legal to give out, I will not, because politics is too sensitive.

If asked a question, say for example, What does the Bible say about abortion, or any other issue, I will show what the Bible says. Basically, I say, read the Bible, read pro and con arguements and then make up your mind.

Christians should not be brain dead robots, but people with critical thinking skills. Of course, a Christian worldview should be based around the Bible. Yes. I have 2 degrees, and have studied most ot the world religions, science, philosophy and "humanism". I made my decision.

On money. If, I was after money, I would have stayed a mid-level computer programmer making 4 times my pastor salary. Would you be interested in donating a Raibeam to a poor preacher?? :-) But then I would need a tower and a rotor and approval from the Historical Commission...:-)

I did not know Trinity Broadcasting was being audited. I have heard about the sex scandal - One of the founders tried to bribe somebody not to talk of homosexual affair. Trinity is not on the local cable system, and I have strong concerns about them. Thanks for the info. In the past, I have watched Trinity mainly to see what strange clothes would be worn, and what outlandish statements made. Sure was fun, but sad -- thinking about the people being duped by them.

It is evident that you are well versed in the many world religions. May I suggest you read the series of books by Lee Strobel? They all start out "The Case for ..." Lee was a news reporter and atheist and has written several books detailing his experiences. Have you read Josh Mcdowells books on Evidences for Christianity? The Caner (Canar, sp?) brothers have some excellent books detailing how they grew up as Muslims and then converted to Christianity.

I'm confused by the statement that Juduism is not monothiestic. The Shema (Deuteronomy 6:4-9) clearly states that. Can you explain that?

It has been fun talking with you. It is past midnight. Time to go QRT.

Randy

3857. Re: NEWS - Researchers invent antenna for light

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 10:01:33 UTC
From: fractenna@aol.com
Message-ID: <20040930060133.11452.00003855@mb-m23.aol.com>
Source record: 88928

(Inventor) Bob's (W1XYZ) patents on this form a basis for ownership on such varieties of antennas, within the construct of the claims. That is my opinion.

The fact that later academic groups allegedly claim discovery or invention on this or other new technologies is irrelevant: the assignee of he patent is what's important.

It is common for academic groups to be 5-20 years behind the state of the art in antenna work BTW.

The CNN story is a nice corroboration of Bob's innovation and invention, in my opinion. Of course, it wouldn't hurt to give the man some well-deserved credit. Again, this is also a fairly common problem in some academic groups these days, unfortunately.

Hat's off, Bob.

73,
Chip N1IR

3858. Re: Giant Cu Cactus antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 11:00:15 UTC
From: KC1DI <elbc2@gwi.net>
Message-ID: <415BE73F.3020206@gwi.net>
Source record: 88929

Jimmie wrote:
> Neighborhood covenant was recently ammended to allow vertical antennas and
> to exclude beam antennas other than TV antennas and smaller. Fortunately for
> me my tribander was already grandfathered in, I lived here before it was a
> neighborhood.. I want to make the best of a Rhon 25 tower I have stored
> away. My tower is 50ft tall and could be extented even taller using vertical
> elements that did not support a load other than themselves. I was thinking
> of tuning the tower into a Giant copper Cactus antenna for 20M thru UHF by
> fastening 1/4 wl stubs on the side of the tower. Any reason why this would
> not work.
>
>
Hi Jimmie,

the only problem i can forsee is that copper and Glavinized steep will
setup electrolisis which will corrode the connection. so you'll have to
treat for that problem.. other than that should work ok.
73 Dave

3859. Already 4 years !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 11:21:59 UTC
From: Thierry <http>
Message-ID: <415bec5f$1@news.vo.lu>
Source record: 88930
Cross-posted to: alt.sci.seti,rec.radio.amateur.antenna,sci.astro.amateur

Hello,

To celebrate the 4th birthday of my site, I propose you a riddle : who am I ?
Four years ago was born a multidisciplinary French-speaking educational web site which dared to approach very original topics like the theory of relativity, quantum physics or the philosophy of sciences. In complement the autor being impassioned for astronomy, meteorologist, photographer and computist, he reserved a large part of his site to astrophysics, bioastronomy and amateur astrophotography, and did recently a digression to meteorology and ecology.
Eclectic in his opinions, prolific and verbose, wanting to touch even more readers, he opened new English pages devoted to amateur astronomy (astronomical optics, image processing, technical comments, software review), radioastronomy and amateur radio, as many activities that he practices with assiduity. But where does he find all this time wondered readers ?...
Today this site acquired its maturity and does propose you not less than 1200 educational pages, more than 7000 images and hundreds of animations and audio files. It even includes a translation module. It becames a reference as testify his guest book. Childs 12 years old connect to it as well as professors at university. One connects to it from all over the world, and to be accurate from 155 different countries. 40% of readers are English-speaking whose 12% come from the USA (6% from Can., 3% from the U.K., 1% from VK) ! To wonder what magnetism comes out from this site !...
But you will judge by yourself. Have you recognized it ?

Indeed, it's LUXORION, already 4 years ; -)
http://www.astrosurf.com/lombry
Partner of the French site Futura-Sciences, http://www.futura-sciences.com/

Thierry

3860. Re: Rohn tower as vertical

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 12:22:35 UTC
From: "Larry Gauthier (K8UT)" <MyCallsign@ARRL.NET>
Message-ID: <10lnukgpsf89lf6@corp.supernews.com>
Source record: 88931

Terry, I have both vertical (shunt fed tower) and horizontal (loops, dipoles) antennas for 40, 80, and 160 -- and find that the dipoles work better for the local QSOs and the verticals work better for DX. Do whatever you can to get the tower as high as possible. My son had an old CB 102" mobile whip that I strapped to the top of this tower to make it 8 feet longer.

Shunt-feeding the tower is pretty straight-forward. It's a lot easier to accomplish with an antenna analyzer (I use an MFJ 259) but you can do it with just an SWR meter.

I would refer you to ON4UN's book, "Low Band DXing" -- great reference material.
--
-larry
K8UT
"Terry Ashland" <t_ashland@yahoo.com> wrote in message
news:6e6aeba9.0409260924.287c77b2@posting.google.com...
> Hi! To make a long story short, I will be moving my beam to another
> tower, and will have a rohn 25g tower that is imbedded in concrete
> approximately 50 feet away from the house. I would like to get a
> decent lower band antenna (not 160). I'm wondering what would be the
> best scenario:
>
> 1. Put up a mast above the 32 feet of tower and hang an inverted V
> (Alpha Delta 80/40) and 30 meter inverted V (common feed). It would
> be up around 40 feet.
>
> 2. Put my Butternut HF2V vertical up on top of the tower and put a
> few resonant radials for 80 and 40 on it. It wouldn't be guyed
> (important here in NW Iowa). I thought about even using the 80/40
> dipole as part of the radials since I already have the antenna.
> (Anybody have any experience with loaded radials?) My HF2V vertical
> ground mounted didn't seem to cut it the last two winters...
>
> 3. Load the tower for 80, 40, and 30. I would need some guidance on
> how to build a gamma match for this situation. If I went this route,
> It would probably not work well for 80.
>
> 4. Extend a mast on top, and string some sort of Inverted L's for 80,
> 40, and 30 and put ground radials at the base.
>
> My primary interest is to increase my DX totals especially on 80 since
> I already have DXCC on most of the other bands. I have a decent
> antenna for the higher bands.

> Thanks
> Terry, WK0F

3861. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 16:32:20 UTC
From: richardharrison@webtv.net
Message-ID: <29501-415C3514-298@storefull-3256.bay.webtv.net>
Source record: 88932

Art Unwin wrote:
"Oh, if we all had the benefit of hindsight the world would be a more peaceful place."

Yes. We make guesses about results from our actions.

I wrote a response to Reg`s lament that Americans are armed and dangerous. Reg implied that Americans are responsible for messes in "ex-Yugoslavia, Iraq, Palestine, Afghanistan, and numerous other places in this small world."

Nations, including the U.S.A. must pursue their perceived self-interests. At times perceptions are wrong.

Oil fuels the world. It is every nation`s self-interest to ensure its energy supply.

Iraq had little to do with 9-11-1. Iraq was rewarding families of suicidal terrorists in Israel. Iraq had tried to assassinate the elder Bush, and Rumsfeld seized an opportunity to strike a blow for israel.

W. Bush told the U.S. Congress, Iraq won`t let the U.N. Arms Inspectors do their jobs. Empower me, the president, to enforce the U.N. Resolutions if Iraq doesn`t comply. It`s the only way to resolve the threat.

The U.S. Congress, eager to blame Bush and avoid responsibility itself for unwise decisions, "bravely" passed the resolution to allow Bush to go to war without its formal declaration of war. Congress thought highly of the Bush administration. Congress has a Republican majority and the Bush administration consisted of very experienced politicians. It was thought that the administration would make wise, if unpopular, choices.

It seems arrogance brought us to the current conditions. When you have allies, you must share control as well as responsibilities, and the U.S.A. thought it knew enough, was powerful enough, and rich enough not to really need much help in Iraq.

The truth is that Iraq was not just an Israeli or American problem and should have been handled with a world-wide coalition. The U.S. and Britain invaded only half-cocked.

Best regards, Richard Harrison, KB5WZI

3862. AEA ISOLOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 16:52:31 UTC
From: ni4k@aol.com
Message-ID: <20040930125231.08240.00001349@mb-m18.aol.com>
Source record: 88933

Anyone know the current value of the AEA Isoloop 10 thru 30mhz antenna with the automatic tuning controller? In original box. Used 1 yr in an attic position. Original manual.
Thanks for any help.
Larry
ni4k@aol.com

3863. Re: AEA ISOLOOP

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 18:24:37 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <415C4F6A.646F5D02@shaw.ca>
Source record: 88934

NI4K wrote:
>
> Anyone know the current value of the AEA Isoloop 10 thru 30mhz antenna with the
> automatic tuning controller? In original box. Used 1 yr in an attic position.
> Original manual.
> Thanks for any help.
> Larry
> ni4k@aol.com

Impedance value is 50ohms when matched. I don't know the current value, but
it would depend on the power.

Irv VE6BP (The Devil made me do it!)
--

Diagnosed Type II Diabetes March 5 2001
Beating it with diet and exercise!
297/215/210 (to be revised lower)
58"/43"(!)/44" (already lower too!)

Visit my HomePage at http://members.shaw.ca/finkirv/index.html
Visit my Baby Sofia website at http://members.shaw.ca/finkirv4/index.htm
Visit my OLDTIMERS website at http://members.shaw.ca/finkirv5/index.htm
---
Irv Finkleman,
Grampa/Ex-Navy/Old Fart/Ham Radio VE6BP
Calgary, Alberta, Canada

3864. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 18:28:18 UTC
From: "aunwin@insightbb.com"
Message-ID: <6fY6d.82584$wV.54553@attbi_s54>
Source record: 88935

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:29501-415C3514-298@storefull-3256.bay.webtv.net...
> Art Unwin wrote:
> "Oh, if we all had the benefit of hindsight the world would be a more
> peaceful place."
>
> Yes. We make guesses about results from our actions.
>
> I wrote a response to Reg`s lament that Americans are armed and
> dangerous. Reg implied that Americans are responsible for messes in
> "ex-Yugoslavia, Iraq, Palestine, Afghanistan, and numerous other places
> in this small world."
>
> Nations, including the U.S.A. must pursue their perceived
> self-interests.
snip.

Not so !!

Nations must pursue the perceived interests of the whole WORLD,
that is why the U.N. was set up. But then the U.S. nullified its intent
by excluding Israel from fault in anyway shape or form.
Until the U.S. declares what its intensions are with Israel the World
is on hold. The World perceives that the next World war or the biggest
threat
is Israel but the U.S. renders that Country as untouchable no matter what
even tho
they broke every condition ,all of them, accepted for the formation of
Israel.
Thus the U.N. is totally split regarding its function while the U.S.
retaines its
arrogance to those in the rest of the World.
When the U.S. begins its next pre-emptive attack against Islam they will
find out for themselves what it is really like to be on one's own.
When WW2 ended displacement camps were gradually emptied,
in the Mid East DP camps are getting larger every day despite helicopter
missile attacks every day, and now the U.S. has supplied the bunker buster
bombs to Israel that it needs for a pre emptive attack on Iran while the
U.S.
holds the World at bay.
If the U.K position in the big wars is to be knocked and had declined the
threat
wrapped up in the Balfour treaty until it had the support of the rest of the
World
then the U.S. is to be knocked for envisaging the Middle East in the same

way
we did in America,.kill all the occupants , take their lands and justify it
by
calling them heathens! We said that' they can run but they cannot hide'
how wrong we are to think that winning a Military war means an occupation of
peace
Art

> snipd.
>
> Best regards, Richard Harrison, KB5WZI
>

3865. Re: Already 4 years !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 18:56:37 UTC
From: Thierry <->
Message-ID: <415c56ee$1@news.vo.lu>
Source record: 88936
Cross-posted to: rec.radio.amateur.antenna,sci.astro.amateur

"Brian Tung" <brian@isi.edu> wrote in message
news:cjha32jvq1@zot.isi.edu...
> Thierry wrote:
> > Indeed, it's LUXORION, already 4 years ; -)
> > http://www.astrosurf.com/lombry
> > Partner of the French site Futura-Sciences,
http://www.futura-sciences.com/
>
> Only four years? It seems like it has established itself for much longer
> than that. Congratulations on maintaining your site!

Hi Brian,

It's like your C5+ website. This is like I always knew it ;-)
I see also that in a few years to extended the web a lot.

"Ony 4" maybe means that it affected you more than expected, hi !
That looks positive.
I only regret to not be able to write better in English and provide you more
useful information.
So currently I only rely on the amateur radio section written in English
where I have developed what i think are interesting pages about ionosphere
and perturbations (solar and geomagnetic) without to speak about the other
subjects. Of course there are always some English page dealing with
technical reviews (optics, astro or radio/DSP software, etc), and
radioastronomy.
FYI, for all pages written in French there is always the translation module
that could help a little and that connect you to wordlingo (but you can also
use (altavista babelfish). The result is not too bad. ;-)

Thierry

>
> Brian Tung <brian@isi.edu>
> The Astronomy Corner at http://astro.isi.edu/
> Unofficial C5+ Home Page at http://astro.isi.edu/c5plus/
> The PleiadAtlas Home Page at http://astro.isi.edu/pleiadatlas/
> My Own Personal FAQ (SAA) at http://astro.isi.edu/reference/faq.txt

3866. 18nH Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 19:56:34 UTC
From: Joe <nuisancewildlife@nospamearthlink.net>
Message-ID: <SxZ6d.5576$ls6.2629@newsread3.news.atl.earthlink.net>
Source record: 88938
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have been searching the catalogs for an 18nanohenry inductor to use in conjunction with a Radiotronix RCR-433-RP Receiver and transmitter pair for a remote control I am working on. Radiotronix has an app note that shows this inductor used with a couple of 8.2pf caps to get good reception/transmission for their modules.

I have been unable to find a source other than surface mount parts. Does anyone know of a source for this size inductor, or know the formula that I would use to wind my own?

I am posting this to rec.radio.amateur.homebrew and rec.radio.amateur.antenna

TIA,

Joe
KB1KVI

3867. Re: Making a simple observation (OT)

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 19:58:08 UTC
From: Chuck <wa7rai@raibeam.com>
Message-ID: <7xZ6d.18258$3n.5275@okepread06>
Source record: 88937

Theplanters95 <theplanters95@aol.comnospam> wrote in message
news:20040930033856.18603.00001751@mb-m07.aol.com...
> Chuck, et al:
>
> Yes, Jesus created the laws of physics and created the universe.

Ummm... this means the universe is
only about 2000 years old, right?

> How can you say Hinduism is a peaceful monotheistic religion? One of the major
> goddess is Shiva. Or what about Krishnia?

Shiva is a lower deity like an archangel...

Krishna was a man.

Most Hindi are vegetarians because they
do not believe in killing... that's peaceful.

Obviously, your mind is made up that
Hindu is not monotheistic.

> The Caste system and
> the Law of Karma is one of the major discriminators in the world.

The Law of Karma is similar to a law of
physics: for every action there is an
opposite and equal reaction - which can
also be said as: "as ye sow, so shall ye
reap".

I don't defend the cast system, but
I do understand its religious basis.

Let me suggest that you should inform
yourself in this regard as well.

> The God of Abraham in the OT is the
> same God of the NT.

Perhaps in the mind of faux-Christians...

But in reality they are contradictory: one a
god of love and compassion, the other a
god of hatred, violence, and oppression.

> On the political side, when people ask or talk politics to me, I tell them that
> the Bible tells us to pray for the kings over us.

The Bible also says to slay the wicked
and perform other violent acts - in complete
contradiction to the teachings of the Christ.

He said in regards to evangelism: "cast not
your pearls before swine".

In regards to politics: "leave unto Caesar
what is Caesar's... ".

>
> If asked a question, say for example, What does the Bible say about abortion,
> or any other issue, I will show what the Bible says. Basically, I say, read
> the Bible, read pro and con arguments and then make up your mind.

The Bible is the work of man.

If you don't believe in abortion, then by all
means, do not have one. On the other hand,
what right have you to enforce your beliefs
on others?

>
> Christians should not be brain dead robots, but people with critical thinking
> skills. .

Where is the critical thinking in ignoring
contradictions and believing illogical
silliness?

>Of course, a Christian worldview should be based around the Bible. Yes.
> I have 2 degrees, and have studied most of the world religions, science,
> philosophy and "humanism". I made my decision

Judging from what you write, either you
weren't paying much attention, or your
'course' was so biased towards the
evangelical point of view, that any
modicum of truth about 'world religions'
was, on the most part, lost.

>
> It is evident that you are well versed in the many world religions. May I
> suggest you read [...]

Been there, done than - many years ago.

Perhaps you should read the 'holy' books
of all religions on your own (as opposed
to being taught erroneous opinions). At
minimum, you could then hold a valid view.

>
> I'm confused by the statement that Juduism is not monothiestic.

So am I. I did not say that!

> It has been fun talking with you. It is past midnight. Time to go QRT.
>
> Randy

I'm glad you're having fun. In truth, this
seems more an excursive in futility, than
any thing else.

Though I was raised as a conservative
Christian, I am neither Hindu, Sikh, Muslim,
Buddhist, Jewish, Christian, Bahai', Mormon,
Eckancar, Brotherhood of light, etc,.

I do recognize there is a measure of truth in
them all (some more than others). For this
reason, it is salient that we do not suppress
any religious thought, or promote one over
another. America, like India, must remain
both democratic and secular.

Cheers,

Chuck, WA7RAI

3868. Re: longer antenna for a Cell phone

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 20:06:48 UTC
From: Mikie <nospam@nospam.com>
Message-ID: <2s37akF1gefv7U1@uni-berlin.de>
Source record: 88939

Cell phone is -2 to -10 dB average down from 1/2 wave and the pattern is
very splintered.
The antenna resonates with parts inside the case and users arm.
Longer antenna is defiantly better, IF it is resonate.
If you get aftermarket, it may not be.
Has to be designed for that particular cellphone.

"Bob Bob" <bcnntp@optusnet.com.au> wrote in message
news:saps22-qvc.ln1@p400bob.lse.com.au...
> This actually begs another question.
>
> How efficient compared to (say) a 1/2 wave dopole is the average cell
> phone antenna? I'd also like to know the difference between those
> handsets that have a antenna sticking out better or worse (dB pls) than
> those that dont.
>
> I guess body attenuation wd be a major factor too.
>
> Cheers Bob
>
>
> Uncle Peter wrote:
> > "Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
> > news:p8G6d.7457$Ki1.340@newsread2.news.atl.earthlink.net...
> >
> >>"Ralph Blach" <rblach@NOSPAMintrex..XXXnet> wrote in message
> >>news:10lk24v1ipnc732@corp.supernews.com...
> >>

3869. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 20:27:38 UTC
From: richardharrison@webtv.net
Message-ID: <29501-415C6C3A-342@storefull-3256.bay.webtv.net>
Source record: 88940

Art Unwin wrote:
"Mid East DP camps are getting larger every day despite helicopter missle attacks every day, and now the U.S. has supplied the bunker buster bombs to Israel that it needs for a pre-emptive attack on Iran while the U.S. holds the rest of the World at bay.

Yes. That`s pretty much the way it is. Remember the "Axis of Evil"? Bush named N. Korea and Iran as members, too. The U.S. has its hands full. Bush admits no mistakes, but Iraq and Iran only differ in spelling by one letter. Bush now knows it was Iran, not Iraq that should have been vanquished. Darn that misspelling! What to do? Give the weapons to Israel so thet can do the job on Irani nuclear facilities.

Best regards, Richard Harrison, KB5WZI

3870. Re: 18nH Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 20:49:16 UTC
From: Paul Keinanen <keinanen@sci.fi>
Message-ID: <unqol0l8k735fgfpo32s845o1edoujnvof@4ax.com>
Source record: 88941
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 30 Sep 2004 19:56:34 GMT, "Joe"
<nuisancewildlife@nospamearthlink.net> wrote:

>I have been unable to find a source other than surface mount parts. Does
>anyone know of a source for this size inductor, or know the formula that I
>would use to wind my own?

"Wind" ?

As a rule of thumb, a thin wire has an inductance about 1 nH/mm, so a
straight wire about 18 mm long would have the required inductance. For
a thicker wire, about 25-30 mm straight wire would be required. Even a
single turn would increase the inductance quickly, so you would have
to shorten the wire considerably.

If 18 nH surface mount inductors exists, why not use them ? At least
the inductance would be much predictable.

Paul OH3LWR

3871. Re: 18nH Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 21:05:05 UTC
From: John Smith <kd5yikes@mindspring.com>
Message-ID: <5y_6d.3067$Yr.2732@newsread3.news.pas.earthlink.net>
Source record: 88942
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Joe" <nuisancewildlife@nospamearthlink.net> wrote in message
news:SxZ6d.5576$ls6.2629@newsread3.news.atl.earthlink.net...
>I have been searching the catalogs for an 18nanohenry inductor to use in
> conjunction with a Radiotronix RCR-433-RP Receiver and transmitter pair
> for
> a remote control I am working on. Radiotronix has an app note that shows
> this inductor used with a couple of 8.2pf caps to get good
> reception/transmission for their modules.
>
> I have been unable to find a source other than surface mount parts. Does
> anyone know of a source for this size inductor, or know the formula that
> I
> would use to wind my own?
>
> I am posting this to rec.radio.amateur.homebrew and
> rec.radio.amateur.antenna
>
> TIA,
>
> Joe
> KB1KVI

A one inch length of #18 AWG wire is about 18 nH at VHF and above, according to the ARRL Handbook, 2004 edition, page 10.10. The equation is:

L = .00508b[ln(2b/a)-.75] where

L is in uH
b is length in inches
a is wire radius in inches
and change the .75 to 1 for VHF and above

So, it kind of makes sense why they don't sell lead-mounted 18 nH inductors. People would complain that they only got one lead, and it's a short lead at that.

If I were trying it, I'd try a one-turn loop of about 1/4 diameter with leads just long enough to solder into the circuit. Maybe all you need is a kinky piece of wire and adjust the kink to tune.

Good luck,
John (KD5YI)

3872. Re: half-wave dipole in the forest

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 22:23:37 UTC
From: Reg Edwards <g4fgq.regp@ZZZbtinternet.com>
Message-ID: <cji119$b1k$1@hercules.btinternet.com>
Source record: 88943

For "Weapons of Mass Destruction" read "Multi-nationals", "Wall Street",
"Energy Resources", "CIA", "Pentagon" and "N.American Branch of the Mafia".
Bush and Blair just obey instructions.

Lord help us!

3873. Re: Already 4 years !

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 22:52:29 UTC
From: Thierry <->
Message-ID: <415c8e37$1@news.vo.lu>
Source record: 88731
Cross-posted to: alt.sci.seti,rec.radio.amateur.antenna,sci.astro.amateur

"Jim Coughlin" <woodwrench@aol.com> wrote in message
news:f4668467.0409301403.3cae85b6@posting.google.com...
> "Thierry" <http://www.astrosurf.com/lombry> wrote in message
news:<415bec5f$1@news.vo.lu>...
> > Hello,
> >
> > To celebrate the 4th birthday of my site, I propose you a riddle : who
am I
> > ?
> > Four years ago >snip
>
> The AP waiting list? ;-)
>

Sorry, but what means AP ?
A new famous sponsor to Luxorion : http://www.eham.net/links/ ;-)

Thierry, ON4SKY

> Jim

3874. Re: 18nH Inductor

Newsgroup: rec.radio.amateur.antenna
Date: 2004-09-30 23:27:10 UTC
From: Paul Burridge <pb@notthisbit.osiris1.co.uk>
Message-ID: <sf5pl0dm27fsh2aj1jqj15qte6a1eosdka@4ax.com>
Source record: 88944
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Thu, 30 Sep 2004 22:10:09 +0000 (UTC), "Reg Edwards"
<g4fgq.regp@ZZZbtinternet.com> wrote:

>However, to find the length, diameter and number of turns to make such a
>small coil you can use program SOLNOID3 which can be downloaded in a few
>seconds, free of charge, and run immediately from the the website below.
>Try it and see what happens.

Does it crash, Reg? ;-)
Seriously, would it not be better to use a spiral PCB trace?
--

"What is now proved was once only imagin'd." - William Blake, 1793.